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The Business Magazine of the Electrical Trade

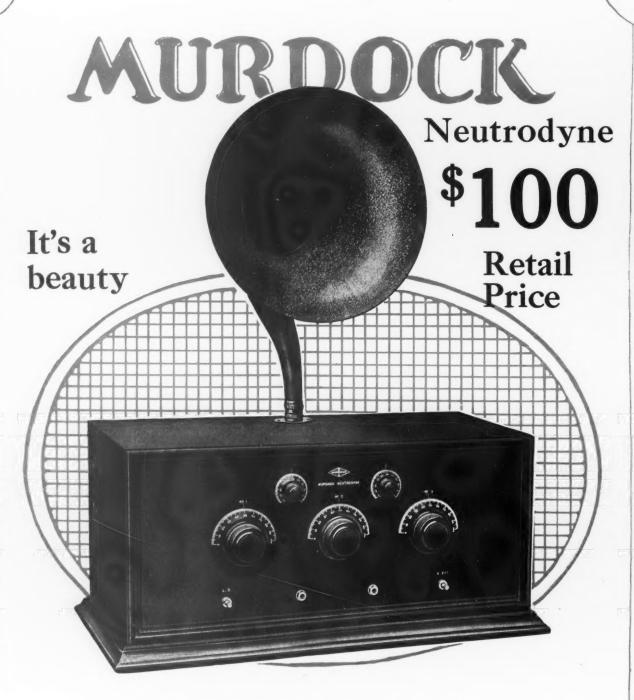
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Why Electrical Selling Will Be Easier in 1925

On the Home Stretch for Christmas Sales

What the Contractor Can Learn from the Plumber

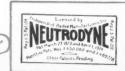
Handling Appliance Repairs Code Discussion



It has long been our idea to bring out a fine instrument like this and price it so low that it would make sales history.

Here it is! A five tube Neutrodyne with built-in speaker and a handsome mahogany cabinet. Compartment in cabinet for "B" batteries. We have a fine dealers' plan to help you sell them. Write or wire at once. A big Christ-

WM. J. MURDOCK CO., CHELSEA, MASSACHUSETTS





When a Nation's Chief Pleads for a "Treeless Christmas"—He Means "Illuminate a Tree on Your Front Lawn."

Last Christmas on the White House lawn, President Coolidge dedicated a tree illuminated by 2,000 electric sparklers. In the dedicatory group are seen Paul Wooton of Electrical Merchandising, William L. Goodwin of the Society for Electrical Development, Inc., and (in front of the President)

T. L. Townsend of the National Elec. Supply Co. President Coolidge has advised the Nation to give up Christmas trees leveled by wasters' axes.

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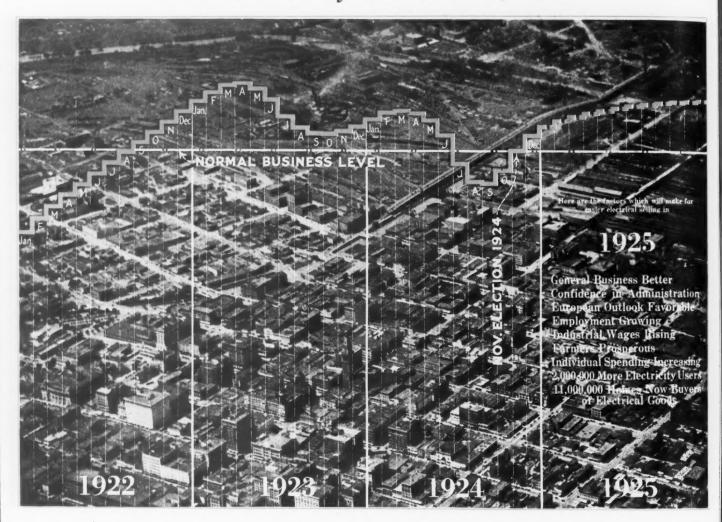
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Industrial Activity and Electrical Sales



How Electrical Selling Varied During 1922, 1923 and 1924 and

The Prospects for Good Business in 1925

COMPILED from average sales of electrical supplies and appliances during the years cited, this graph traces the rise and fall of electrical sales from month to month, and the predicted period of "easier selling ahead" during 1925.

Note that although electrical sales were 20 per cent "off" at the beginning of 1922, they recovered enough to reach normal by August, 1922, and closed the year above the line. Sales for 1923 were marked by a Spring peak of 20 per cent, followed by a Fall drop. This was repeated during 1924, when mid-year sales slumped to 10 to 15 per cent below normal,

coming back quickly after the November election.

For 1925, all authorities in the electrical field predict a steady increase to a sales volume of 10 per cent or more above the average year's business. That this expansion will be sustained throughout 1925, is assured by such prevailing factors as those listed: General business better, confidence in the Administration, European outlook favorable, employment growing, industrial wages rising, farmers prosperous, individual spending increasing, 2,000,000 more electricity users, and 11,000,000 homes now buyers of electrical goods.

Electrical

with Which Are Incorporated Electrocraft and Lighting Journal

Volume 32

December, 1924

Number 6

Sizing Up the Business Outlook for 1925

of radicalism as personified by the Wisconsin gentleman with the pompadour hair, has been spanked by public opinion and put to bed. There is every prospect that there will be no extra session of Congress next year to rasp the nerves of American Washington is talking business. about a further general tax reduction. Worry over the European situation is greatly relieved by the adoption of the Dawes plan and by the British election. Indications of improving business conditions, foreign and domestic, general and specific, are coming in from all sides. Confidence is growing throughout the

So the man who is making his living in the electrical industry can take a bit of comfort and encouragement. Clearly, it all means better markets, easier selling, and surer profits-for the dealer, the contractor, the central station, the jobber and the manufacturer.

It has always been so when a good presidential election has followed a period of depression in business, and especially when things have shown a strong tendency to pick up in advance of the day of voting. It will be so now and the merchant considers himself free to plan ahead a bit. He wants to base his plans, of course, on what may be expected to happen in 1925. He wonders, naturally, just what is going to happen and why, how much business may really be expected to improve.

Let's just examine into the facts of it a minute. It is quite as im-

HE election is over. Calvin portant to the electrical dealer and Coolidge will be president for the contractor, as it is to any other four years more. The spirit man, that he should have a clear picture in his mind of the true conditions that are going to influence his opportunity. The manufacturer and the jobber may have a larger financial stake involved but a knowledge of these facts are no less vital to the merchant in his store, for on all these circumstances which go to make up the general economic situation depends the public's state of mind toward buying and toward spending

What Makes Good Times?

Well, what are these conditions, what are these circumstances that tell a man today what to expect? Let's look around a bit. A review of the "economic situation" sounds very deep and mysterious and important when the banker or the big business man rolls it off his tongue. But as a matter of fact, usually it isn't any one big thing and it isn't hard to understand. It is the combination of gossip about this and that, a fact here, some interesting news from there, that together are just many

little straws pointing the path of the prevailing wind. Any merchant, any electrical dealer who has a pair of eyes can see them if he will look.

What makes business good or bad? Boiled down it all hinges on the way the people feel. Whether the men and women in this town and that are in the mood to spend or in the mood to skimp. Good times or bad times just spell the difference between optimism and pessimism in the popular mind. This is going to be influenced primarily, of course, by the state of employment, the trend of wages, whether general business is brisk or quiet, whether the outlook for prosperity is cheerful or dubious. For when business is good and there is no end of work in sight, men and women shop and buy and spend. That means busy retailers, busy wholesalers, busy manufacturers so "the goose hangs high."

From the standpoint of the dealer, therefore, the important thing is to gauge the probable trend of general business, and the state of general business depends on a lot of very definite conditions in the country, and is indicated in a very definite way. It is not hard to read the symptoms. Here's the way we find

Spending Is at High Level

We say that business for the dealer depends on whether or not people are spending money. Well, Let's see how freely they actually are spending. The period of depression this year reached its bottom about July 15, when business slowly started to pull up out of the hole. Ever since that time the people of

Why Selling Will Be Easier for the **Electrical Merchant During the Year** to Come-A Review of Present Symptoms drawn on the banks that are members of the great Federal Reserve system have been spending much more money than they did last year -to the tune of four billion dollars in July, five billion dollars in August, two billion dollars in September and nearly three billion dollars in the four weeks reported in October. Just turn that over in your cerebellum. That shows one thing—that men and women are drawing more checks; they are spending freely.

Building and Industries

Building construction also has a big influence on the business of the dealers because new houses mean new homes for which people buy new furnishings and new equipment. Here we find many helpful signs. Every section of the country except the Southwest showed a higher total of building permits in the month of September, 1924, than in the same month last year which would indicate a large amount of winter building in prospect. Building construction has been a little in advance of normal this year, and is expected to continue so. Next year is expected to develop more industrial building as a direct reaction from increased industrial activity and this also brings with it very large equipment purchases.

Industrial production has been large throughout the year, notwithstanding the admitted depression in steel, textiles and certain other industries. Right now iron and steel production is improving. The textile industries are doing somewhat better. The woolen and worsted industry is showing rising prices. silk industry is prospering. Automobile sales are very satisfactory and the tire factories are operating at a high level. The shoe industry is more active. The price of metals is generally better. Industries are in a good condition and labor is well occupied.

On the Farm-Prosperity

Because one-third of all the people in the land are farmers and the condition of the farmer is a big influence on everybody's business, it is an important symptom, therefore, that the agricultural situation right now is the best in years. All crops have been large with the exception of corn and the prices are remunerative.

the United States whose checks are higher. The Department of Agricul- facturers as a whole are probably ture calculates that compared with from 10 to 15 per cent behind last prices of other commodities, agricultural products stand now as 90 to 100, whereas not very long ago the ratio was 65 to 100. At the same time foreign crops have fallen down and grain shipments in September were over a third larger than in the same month last year.

> As a result of all this-better crops, busier factories, brisker trade -employment has been increasing, wages have been increasing, per capita earnings have been increasing, and the purchasing power of a great proportion of our people has been expanded tremendously. As a result, heavy sales are reported by the department stores, chain stores and mail-order houses. The business of department stores increased 11 per cent more than usual in September.

Stocks on the shelves of wholesalers and retailers are generally low. Stocks in the hands of fabricators are also low. Buying has been on a hand-to-mouth basis for some time past, and the manufacturers see clearly ahead on a very large general demand for all classes of products.

Money is plentiful and cheap. There is a good market for stocks and bonds, which promotes construction, creates a demand for labor and material and gradually stirs activity to all kinds of business.

The Electrical Industry

All right, now let's just take a close-up of the electrical industry itself and read a few of the family symptoms that show how we ourselves are reacting to these better times. The curve opposite the first page of this article gives a rough approximation of the trend of the electrical business in the past three years and an indication of what its course may be expected to proceed through 1925. There is a very wide diversity in the actual sales records for 1924 of different companies with different products. There has been a very large amount of central-station line construction. There has been a great deal of home building and a big volume of commercial and industrial building also. The lighting field has been greatly stimulated by the home lighting contest. The appliance market has been good. Radio has boomed along until a three hundred million dollar mark has been Wheat stands \$1.59 against \$1.10 a reached this year, and this is just year ago. Rye is nearly 85 per cent the beginning. The electrical manu-

year in total sales and this would seem to be very satisfactory when it is considered that 1923 had a strong boom period. But since about July 15 of this year sales have been sailing steadily upward. They are now crossing the line into better than normal times, and total sales next year will be 10 per cent more or better than in 1924.

There will be 1,000,000 more homes to wire next year and to appliance. There will be 300,000 more stores, offices and commercial buildings to equip. There will be thousands of new factories-no man can say how many. More and more appliances will be sold to the 12,000,000 homes now already using electricity but all very inadequately equipped. Probably a million radio sets will be marketed and radio manufacturers already sold out a year ahead. There, in a nubbin, is the outlook.

Cashing In on It

Already the electrical market is quickening in every direction. The people of the Pacific Coast squelched by a two-to-one vote, the threatened effort of the politicians to force public ownership on the electric power industry in California and Washington. That has immediately reacted in a better volume of business for the Northwest and a quickening activity all along the line.

And so it is across the country. A stronger confidence, a keener enthusiasm, a more courageous attitude in buying is beginning to be felt. Jobbers are buying from the factories and dealers are buying from the wholesalers. And it is all because Mr. and Mrs. John Smith are feeling better, thank you, because the times look good and so they are spending money for the things they want and now are not afraid to buy.

Next year will bring easier selling and better profits to the electrical dealer-and 1925 from the standpoint of business policy has already begun. Every electrical man faces a bigger opportunity than he has ever had within his reach before, because the electrical market is pyramiding year by year, bigger and bigger because a million and a half more homes begin each year to buy electrical goods. How much of this opportunity he cashes in, of course, depends on his initiative, just as it does in every other business.

The Studio of the Blumenthal-Kahn Company Presents

The "Fixture Display Niche"

To the fixture studio of the Blumenthal-Kahn Company, Baltimore, Md., goes first place in this month's pictorial Hall of Fame, first, on account of its exquisite appointments and originality in floor arrangement, and second, because of its enterprise in "staging" fixture demonstrations. Practically all sales are made in the conference room, shown at the bottom; right of page. On one side of this room is a small window or niche fitted with drapes of heavy red Italian brocade, which can be pulled closed. The fixtures to be shown to the customer seated in the conference room, are installed in this "stage" from the rear by the shop men, without any disturbance to customer or sales conversation.

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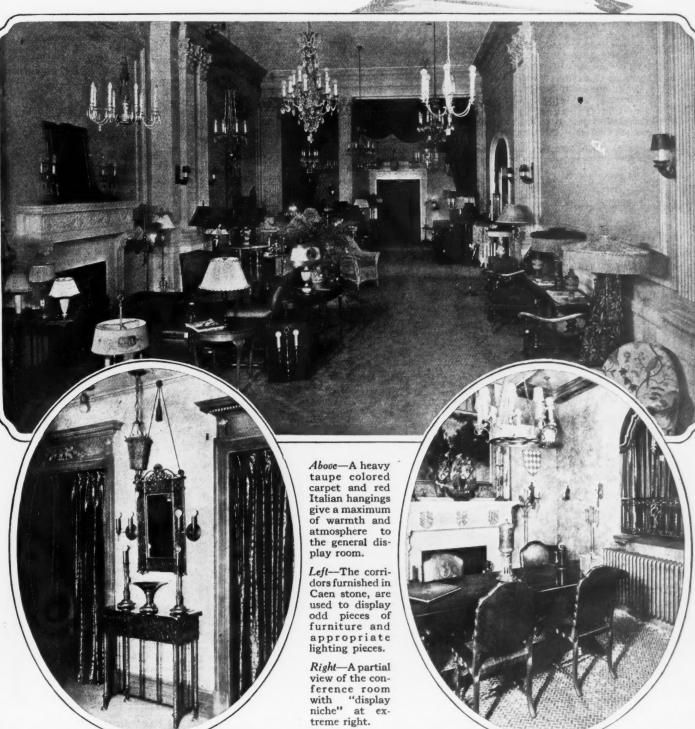
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"On the Home Stretch for

Lamps shed Yuletide radiance—This bridge lamp is decorative. A lamp can be privately owned, but its radiance is diffused for the enjoyment of the entire family. The variety of styles and decorative effects is endless but this one is chosen for illustration. It has

Junior floor lamp—With its modified height, and its generous yield of soft light, it will brighten any corner of the house. It, too, has

Soft lamps warmly glow with Yuletide cheer—When the genial spirit of the season is reflected in every activity, the household, too, in its appointments seeks to express it. What more important then, than the warm invitation of soft light shed by lamps deftly placed in many rooms? And as gifts, they are most happily chosen, since their constant use brings daily enjoyment to the recipients. A lamp for every corner is in the collection. The groups here represented are typical of the extensive number

of designs to be found. And there is such a comprehensive assortment, both of table and floor lamps, that every possible preference and budget may find its choice.—

Marshall Field & Company, Chicago.

Floor and bridge lamps present a gift selection of rare delight—Just to look at the tall, graceful standards, and glowing, colorful shades is inspiration to the gift seeker. And choosing from this selection, standards and shades of matching beauty may be had at very moderate prices.—T. Eaton & Company, Ltd., Winnipeg, Can.

Gift lamps—Beauty without light is not beauty. Give lamps to those who love beauty.—Hahn's, Newark, N. J.

When considering an artistic electric lamp as a gift you do not have to consider the question "Has she a lamp?" Probably she has a lamp—but she never has enough beautiful lamps. On the hall table, in the reception or living rooms, for the dining room table, for the boudoir, in all the bed

It is hard to say which will be your first thought upon seeing these attractive offerings—a conjuring up of the picture of one of these models in your own home or the thought of your card tied to one of them, to delight a dear friend on Christmas morning. In either case, the saving is most inviting, the variety of designs presented is a most gratifying matter.—Bamberger's, Newark.

"Use these coupons—they will solve your service problems or your gift problems" is a conspicuous announcement at the bottom



THIS IS THE TYPE OF AD WHICH HELPED BOOST THE ELECTRIC SHOP SALES EACH YEAR TO A TOTAL RUNNING INTO SEVEN FIGURES



THE SUN NEVER SETS ON ELECTRICAL APPLIANCES— IN FAR-OFF HAWAII, THE UTILITY OF ELEC-TRICAL SERVANTS IS STRESSED

Christmas Sales? — Get a Greater Share of the Gift Dollars — By Advertising as These Merchants Do!

is not working properly. It is understood that this call does not obligate me to any purchase or charge for service."

On the right is: "I am interested in a Please send me full details of your plan whereby I can make this as a

gift and pay with deferred payments and get the . get the _____ free." This last coupon refers to an offer of one appli-This ance-flat-iron, curling-iron, toaster, waffleiron, percolators and others—with each purchase of a cleaner, range, washer or other considerable article purchased.

Gifts for special tastes was a plan for making suggestions in a new way, used in newspaper advertising by Marshall Field & Company, Chicago. For instance, under the sub-head of "If They're Literary" was suggested a reading lamp. Some of the

of Christmas advertising of the Heating and Appliance Company, Inc., Utica, N. Y.
To the left of this is a coupon:

"Please have your service man call. My

"If She Would Ajourneying Go" (traveling iron or curling iron), "If She Has Hospitable Tendencies" (almost any cooking appliance).

Give comfort gifts this Christmas—There are so many electrical appliances that bring helpful assistance and kindly comfort to the sick-room, or to those who have passed through three-score Christmas seasons. These are the thoughtful gifts, the useful gifts, that speak continually of your tender devotion. Electric heating pads, radiant heaters, immersion water heaters, broth heaters, electric tea kettle, eye-comfort reading lamps, vibrator outfits, clamp-on bedside lights.

Trees joyous with color and lights-The brilliant little lights twining so colorfully about the dark tree enrich the merriness of the picture. Tree lighting outfits

You never see an electric appliance put

away on a shelf or up in the attic with the soon-discarded Christmas gifts. A lamp is used and enjoyed every time that dusk falls. A toaster is present at every break-The electric washer comes into service every Monday. And as often as any of these gifts is put to work, you and your generosity and thoughtfulness are recalled."—Commonwealth Edison Electric Shops, Chicago.

For a thoughtful man's gift to his wife we suggest—An electrical appliance which will lighten the too heavy burden of household drudgery. If you would see the shining light of gratitude in her eyes on Christmas morning and would see it repeated in the days and weeks and months and years to come, then give her one of the modern miracles—a device which will do the heavier work of the house for her. A gift that will save her best energies for the finer things of life.—L. Bamberger & Company, Newark, N. J.



SHOWING THE PROSPECTIVE BUYER WHAT BECOMES OF THE GIFT—IF IT'S ELECTRICAL. ANOTHER EXAMPLE OF COPY WITH A UTILITY APPEAL



WITH ILLUSTRATIONS, TEXT AND PRICES, THIS AD MAKES GIFT BUYING A PLEASURE—NOTE THE EXCELLENT USE OF DECORATIVE ELEMENTS

Problems that come up in every-day business

How much merchandise should a store clerk sell?

Where can part-time employees be obtained for the holiday rush?

What is a fair percentage to appropriate for advertising?

When does turnover fail to bring returns?

What allowance must be made for "servicing" appliances?

Are you misleading yourself by confusing salary and profit?

A Fair Quota for Sales Clerks

QUESTION: For some time now we have been having five salespeople in our store, but it seems our sales do not warrant such an expense. We pay our clerks from \$20 to \$30 and their gross sales will average about \$800 to \$1,500 a month each. Are we expecting too much of our sales staff? Can you tell us what volume of business should be maintained for this number? Inquiry 100

ANSWER: From a preliminary study of a census now being made by *Electrical Merchandising*, it seems that a fair average in sales to expect from a clerk in an electrical store is \$1,500 to \$2,000 per month. Applying this to your own business your total sales should reach at least \$90,000 a year.

There is probably no easier way to load a store with excessive expense than in the sales force and it should be watched.

Where Can Part Time Employees Be Obtained?

QUESTION: During the holiday season, one of the most important questions confronting us is, where can we procure the necessary help in our selling staff for this two months' business rush? We have no little end of trouble in picking and selecting a suitable staff for this period, perhaps because of its temporary nature. Have you any suggestions which would help us?

Inquiry 101

ANSWER: We know of no better place as a field for mobilizing a temporary selling staff than in your

own commercial high school or nearby colleges.

In many cities and it may be true in your own, the commercial high schools have courses which carry with them part time training, requiring the student to go into the field and receive first hand practical training.

This serves as a motive, and again because of the holidays being so near there is a desire on the part of many of these students to earn extra money. In fact many of them depend on this period to earn part of their expenses for continuing their studies

Again you have those institutions giving young men special study in the evening. Many of these close about two weeks before Christmas. Frequently they may be procured for this short period.

We have seen it work out many times that from these temporary clerks a splendid selling staff is mobilized and it would pay to keep a careful record of their sales and work.

Percentage Allowed for Dealer's Advertising

QUESTION: During the past few days I have been comparing the advertising expense of several types of retailers other than electrical and I find it ranges from 1.57 to 4.25 per cent in some cases. Our advertising expense for the past year has run about 4 per cent of gross sales. This may or may not be high but I am anxious to hear what other stores' experience has been.

Inquiry 102

ANSWER: In the question of advertising expense, the experiences of stores vary. If the market is well covered, the advertising expense is going to be greater and especially so if the advertiser is not established in the community. On the other hand, if the advertiser is well known and has established a substantial good will, the amount spent will be materially less than in the former case.

There is a group of electrical stores with annual gross sales ranging from \$500,000 to \$1,000,000 that has experienced a range in advertising expense of from 1.5 per cent to 3 per cent of gross sales. There was a low of 1.32 per cent while a high was experienced of 7.67 per cent.

Without knowing all the details surrounding your business conditions we should say that your figure of 4 per cent was not an extreme high point. Especially so when we consider that the merchant has had to resort to more advertising during 1924 to attain the same gross sales of a few years ago.

Again you will probably find that should you reduce your ratio of advertising expense to sales for the coming holiday season, you will close the year at a smaller advertising expense. Whether you can do this profitably is a question only you can decide.

Is There a Limit to Stock Turn?

QUESTION: This year, as you know, has been much slower than last in point of sales, and practically the only way we have weathered the storm has been by increasing our

turnover. Thus far our turnover in merchandise figures about five times. There is a question in my mind just how far we should go in this direction and I am wondering if you have any data showing a limit.

Inquiry 103

ANSWER: Without knowing the size of your city as to population or the size of your store in point of sales, it is a little difficult to give you any specific figure. However, there is a very definite limit to this rate of stock turn of which you speak.

Merchants generally this past year have spent every effort in their endeavor to increase their stock turn. Their main reason for doing this was undoubtedly to reduce the overhead cost of doing business especially in such cases where specific expenses could not be reduced. We will also allow that another motive was for the procuring of a greater profit than they had experienced in previous years.

Though a reduction in overhead may be experienced in this way, there is a decided limit. This limit is hard to place in terms of figures. It depends upon management and conditions.

However, it is that point where the merchant is no longer able to give his customers the merchandise they want in point of size, variety and price. This outcome is the result of two things. Either the merchant has lost complete track of stock and so cannot gage his purchases, or the stock is moving so rapidly the management cannot control it. In either case, it is solely a question of management. When this point is reached there is a definite loss of customer good will and potential sales. Good merchandising is giving the customer what he wants, when he wants it and at a price he wishes to pay.

What Should Service Expense Be?

QUESTION: We are carrying and selling the very best in nationally advertised washing machines, vacuum sweepers, etc., yet my service charge for the past ten months has reached about 5 per cent of our gross sales. As these sales are only recent, it seems to me this is altogether too high. Can you help me from the experience of others?

Inquiry 104

ANSWER: Thus far there has not been a great deal of survey work carried on in the electrical trade so it is impossible to give figures for any group of stores. However it will probably help you to know that a large retail distributor in one of the larger cities of the Middle West finds that his service expense runs about 4.37 per cent of his gross sales.

He further divides his service expense into: Salaries, 2.04 per cent; supplies, 1.917 per cent; and automobile expense, 42 per cent.

Store Clerks' Salary Expense

QUESTION: Our expense for store salaries has been running about 12 to 14 per cent of our gross sales. This seems to me to be rather high, especially in light of the fact that many house-to-house salesmen are only paid a commission of sometimes as low as 15 per cent. If this is the prevailing rate for paying store clerks it is very apparent that a large part of the margin is used in this direction, in fact perhaps too large and may account for the many complaints of dealers in the past that their margin is not sufficient. Have you any data in lines of business other than ours or have you any definite data on electrical stores that may help?

Inquiry 105

ANSWER: Your question is very interesting, as it brings up a ques-

What Problems Have Been Bothering You?

Every reader of Electrical Merchandising who has problems that have been worrying him in connection with his business, is invited to write in and get, through this department, benefit of the practical experience of other merchants in solving similar situations.

Each inquiry will be treated in confidence, and no names or addresses will be divulged without permission.

Address your question to the Editors of *Electrical Merchandising*, Tenth Avenue at Thirty-sixth Street, New York City. tion of the entire trade. What about the margin? It would seem to us that your ratio of salary expense of store clerks to total sales is too large. Comparing your figures with those of other fields there is only one that approaches it, that of the drug store.

For your information the following table will give some idea what the low, high, and common figures are in other fields.

	Per Cent	High Per Cent	Common Per Cent
Retail jewelry stores	3	21.3	9.8
Retail drug stores	7	20.8	12
Retail hardware stores	2.57	15.8	6.2
Retail grocery stores	2.22	10.54	4.9
Retail shoe stores			10.8
General merchandise stores	2.1	13.08	5.6
Department stores			7.1

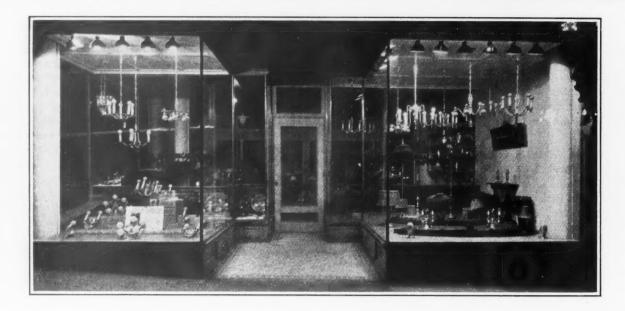
Electrical Merchandising is making a special study in this connection which will soon be ready but from the data thus far gathered we look for the salary expense of store clerks to run about seven to eight per cent of the gross sales.

Charging Business with Owner's Salary

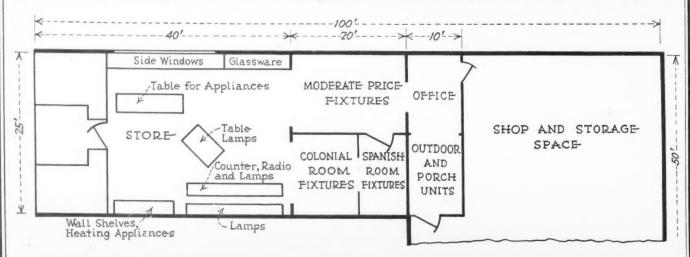
QUESTION: My store is a very small one, situated in a town of about 8,000 population. My son helps in the store routine and sales and is paid \$25 a week. Some time ago I attended a meeting where investment was discussed and a speaker brought out the point of charging into the store's expense the salary for the owner. Up to this time I have not done this, leaving all remuneration to be taken from the profit. Am I right or wrong, and can you throw any light on this question for me?

Inquiry 106

ANSWER: It would seem to us you are wrong. In fact what you call "profit" is not profit, but part of a "margin" from which you are to make additional deductions, namely, the cost of the time you put into the business. What would you have to pay another man to do the same work? This seems to us to be your question. The fact that you are managing makes no difference, for if you were not another would have to assume these duties, and an additional salary expense would be necessary. If you were to work for someone else you would expect a salary and the fact you work for yourself is only a question of ownership. Profit is what is left after all costs and expenses are paid, and your remuneration for service is part of the expense.



Window Displays and Store Layout—Two Factors in Solon's Success





Top of page—Windows that bring the shopper in. The window to the left, a fixture, sold three fixture orders in four days besides bringing in several prospects. The gentleman selling the days besides bringing in several prospects. Above—Fixture display rooms in the rear leave an inviting space for radio approfit) is the owner, A. Solon.

Does Spending Money On a Display Room Pay?

By Moving Into New Store and Spending \$5,000 for Alterations, Duluth, Minn., Dealer Increases Gross Business and Gets Patronage of Customers Who Buy for Quality

By L. E. MOFFATT

tor-dealers' stores is determined by the rent. The connection between rent and overhead causes the dealer to take a place with one small window and a long, narrow, dark store. Attractive display of merchandise in such a place is difficult or impossible, and in consequence the woman shopper goes for store plans and fixture displays somewhere else.

Cheap rent means small sales of cheap merchandse. The customer who has the money to buy higher priced goods goes to the well-located store where fixtures, portables and appliances are displayed in surroundings that help to sell them.

The contractor-dealer who wants a better store but hesitates because of the increased expense, will be interested in the experience of a Duluth dealer who moved some months ago from a store that was a handicap into one that has proved a sales and profit asset.

Engaged a Good Architect for Alterations

The Universal Electrical Supply Company, of Duluth, Minn., has been in business for some years. Fixtures were a large part and a growing part of its business. But retail fixture sales were made at a great disadvantage. The store did not furnish the right kind of a setting for fine fixtures; the kind that made the profit.

A new and better store was necessary if the fixture business was to grow. And if it was to be a new store, A. Solon, the owner of the business, determined that it should be distinctive enough to be a selling asset. The old store had been a selling liability.

HE location of many contractures. We leased a corner store in a well-located, new building, and for the alterations and store fittings we engaged a good architect.

> 'To show the architect the character of store we had in mind, we gathered a file of back numbers of Electrical Merchandising and went over them with him. Many ideas

How "Electrical Merchandising" Was Used in Planning This Store

"To show the architect the character of store we had in mind, we gathered a file of back numbers of 'Electrical Merchandising' and went over them with him. Many ideas for store plans and fixture displays suggested by this magazine were incorporated in the plans."

A. Solon, Owner,

Universal Electrical Supply Company, Duluth, Minn.

suggested by Electrical Merchandising were incorporated in the plans."

Alterations and remodeling cost about \$5,000. There are four fixture display rooms grouped at the rear of the store. The absence of sample fixtures on the ceiling in the front of the store gives an air of spaciousness that invites the shopper. The fixture rooms have a dropped ceiling and the front is attractively finished by slender colonial wood pillars and a decorative wooden railing.

"We had to sell the customer first shows, in a correct environment, a when many buy nothing, they talk on the store," said Mr. Solon, "before distinct class of fixture. The fixture to other women who admire and talk we could begin to sell them the fix- room to the right, at the rear, is a about it and advertising hasn't yet

colonial room with paneled walls. Here, high-class living room fixtures are shown.

In the rear of this room, through an arch, is the Spanish room. Here fixtures of wrought metal are displayed and the background adds value to the fixtures. Fitting up this room cost about a thousand dollars. The ceiling is beamed with hard wood and the door was designed by the architect and made to order. Door and beams are of natural wood; rubbed, oiled and polished. walls are of rough plaster in a putty color; they are not painted; the color having been mixed with the plaster.

Women customers are especially interested in the treatment of the floor and the door frame and base board. The floor is painted black with board lines of bright vermillion at uneven intervals. The base board and door frame is painted a lighter putty color than the walls and stenciled with a Moorish figure in bright greens, blues and orange.

Bringing the Women Into the Store

Here on a moderate scale and at a relatively moderate cost has been created something different; and something that moves the woman who is planning a home to say: "I would like to have something like that in my new house." It is not far-fetched to believe that this favorable impression, this room that she would like to have in her new house, is carried over and influences her choice of the shop that sells her the fixtures.

Expense of this kind is justified as advertising, in the fact that women come into the store to look at Each of the four fixture rooms this room. Many buy, but even



The Spanish room of the Universal Electrical Supply Company, Duluth, Minn., used for the display of high priced fixtures. The interesting decoration of this

carefully planned room brings the woman home builder in to look at it. And she usually leaves an order on her way out. Better still, she tells her friends.

found a better medium than a talking woman.

Here are some figures that go to show that the better store is paying for itself. The average sale is higher.

"In the old store," said Mr. Solon, "our maximum fixture order was around \$100. Now sales from \$300 to \$500 are not unusual. Not long ago a gentleman walked in and asked about a particular porch bracket which was in the window. The bracket was an especially fine one and from this customer's interest in the bracket, we sold him the fixtures for a \$75,000 house. He told us that he had expected to buy his fixtures in one of the big cities because he did not expect to be suited at home.

"We are finding more and more that stocking the finer fixtures creates a desirable class of business. The same thing is true of portables and floor lamps. We have sold, in the last three months, about a hundred floor lamps which, because they were highly priced, we hesitated to put in. Sales on these aggregated over \$3,000 and the cheaper line we stocked at the same time is still on hand. We felt sure that we could sell the cheaper line because it was the sort of merchandise we had always sold.

"We are beginning to do a good business also in mirrors, end tables, vases and candle sticks. We sold 16 mirrors last month for something over \$150. This is not so much perhaps but the profit is very good and

all velvet because there is no effort made in selling them.

The large window space is used with interesting results in direct sales. As can be seen in the store plan and photo there is a window running 40 ft. down the left hand side of the store. The street at this side is a very steep incline and the floor of this window is a succession of steps. Each of these levels or

Increased expense for a well-planned, new store in a good location resulted in:

Increased business,

Increased amount of the average fixture order,

A business in higherpriced, higher-profit, table and floor lamps, and

The patronage of customers who buy for quality and not for price.

steps were dressed with different merchandise. Mazda lamps in one, portables in the next, heating appliances in the third and so on. And these windows did not produce results.

It was the lamp salesman, appropriately, who suggested the remedy. He thought that if the whole length of these windows was filled with Mazda lamps and Mazda advertising; that anyone walking up or down past

this long window would get such an eyefull of lamp salesmanship that a high percentage would be brought in to buy.

Whether this was the reason or not, the windows that followed this suggestion made sales. The highest day's sale on lamps had been \$10 and the average \$5 before this line of windows was given up to lamps. During the time the lamp windows were in, sales averaged \$25 a day.

The front windows are changed every week and whenever possible the windows are tied in with national advertising.

Many dealers are of the opinion that a window devoted entirely to fixtures does not pay. The fixture window illustrated paid Mr. Solon.

This was trimmed with moderately priced fixtures that are being nationally advertised. A double spread ad was shown in the center of the window and the fixtures with price cards were grouped around it. This window had been in four days when the photo was made and three sales had been made direct from the window and six prospects who were building houses had come in to ask for further information.

Manufacturer May Refuse Discount to Group Purchasers

The decision of the Circuit Court of Appeals that a manufacturer who permits an operator of a chain system of stores to compute the purchases of all stores in applying for a discount but declines to permit operators of individual stores who form a corporation or association for purchasing to calculate the purchases of all stores in securing a discount does not violate the Clayton Act-will stand. The United States Supreme Court, on October 20, denied an application by the Federal Trade Commission for a writ of certiorari to appeal from a decision in favor of the National Biscuit Company. The Circuit Court of appeals held that in its position as outlined, the National Biscuit Company did not create a monopoly or tend to restrict competition among manufacturers; and held against the "cease and desist" order which had been issued by the Federal Trade Commission and which had declared that the practice of discounts by the company constituted discrimination.

Changing These Window Displays Paid

—Here Are the Figures to Prove It

Percentage increase in lamp sales due to windoy displays......56 per cent Total increase in one week's lamp sales for \$536,25 five dealers Average increase in lamp sales for each 107.25 dealer Additional compensation for each dealer due to increased sales (at 30 per cent).....\$32.17 Direct expenses in setting up displays: Crepe paper, or cloth (cost \$50, serviceable for 50 weeks) one week's use Labor: \$30-a-week clerk working 1½ hr. at 624 cents an hour ... 1.94 Average reward to dealer for changing win-\$30.23 dow display

How much in dollars and cents is it worth to an electrical dealer to change a window display and put in a new trim featuring some attractive line of interest to passers-by?

What increase in sales can be traced to such a new window trim, and what profit from such additional sales can be gradied to the change of display itself?

be credited to the change of display itself?

An investigation to throw light on this question has been carried on with the co-operation of a group of electrical dealers, by E. F. Newkirk of the Edison Lamp Works at

For this experiment using incandescent-lamp displays, Mr. Newkirk selected five stores. For one week, before putting in the new displays, careful records were kept of the ordinary lamp sales in each store. Then, attractive lamp window trims were installed, and records were again kept of weekly sales as influenced by the display.

Lamp Windows Increased Sales from 37 per Cent to 92 per Cent

Using a standardized trim furnished by the lamp manufacturer, the windows of this group of five stores developed an average increase in sales of 56 per cent when compared with the previous period when no lamps were displayed.

The lowest gain in point of sales experienced by any of the stores was 37 per cent while the highest gain was that of 92 per cent reached by the J. C. Hoose electrical store, of Brooklyn.

Though no definite deductions were made for the cost of setting up the windows except for cost of material used and cost of labor for installing the display, the margin was sufficiently large to allow for other deductions and still present a substantial gain.

As shown by the figures in the table above, labor charges and material cost for the group averaged \$1.94 for each store, and this deducted from the average margin or gross profit as formerly termed, showed a net return to the merchant of \$30.23 as his reward for putting in the new window display.

One of the most interesting examples showing the real worth in a change of window display was the case of J. A. Greening. This store is located, not on the busiest street in Brooklyn, and has an added disadvantage of an entrance below street level; yet it was found to have secured an increase of 49 per cent in its sales for the test period.

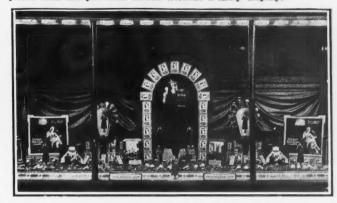
Not alone was the increase of sales experienced in lamps for the store of J. C. Hoose Company, which showed a high gain of 92 per cent in these; but there was also a gain of 50 per cent in radio sales, and seems to show quite conclusively that though a display may feature certain merchandics it does not be said to said the contract of the said that the said the

clusively that though a display may feature certain merchandise it does aid to move others.

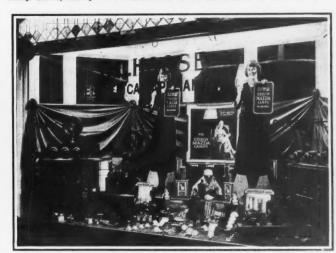
Window displays do pay. The public is continually looking for something new, and if windows are to present their true pulling power a common characteristic of human nature must be recognized—that of seeking something different.



J. A. Grenzig of Brooklyn, N. Y., although not located on a busy street and with a store a few steps below sidewalk level, takes full advantage of his show window. The display pictured remained in his window more than two weeks, and an accurate check-up of results showed 49 per cent increase in Mazda lamp sales, compared with the previous month without a lamp display.



The A. Delbon Company's store is located in the high-rent zone of busy New York. Notwithstanding many lines of merchandise to push and many requests for window space, the management decided to devote one whole window for a week to featuring incandescent lamps. A careful checking of results proved that it paid well, for in addition to a 37-per cent increase in Mazda lamp sales, many new customers were attracted to the store.



An attractive window display not only sells the goods it features but it also helps sales on other lines by proving that the show window is an index to the character of the store. The J. C. Hoose electrical store in Brooklyn, N. Y., carefully checked its daily incandescent-lamp sales for a week and then installed this display. A further daily check for a week while the display was in, showed a 92 per cent increase in lamp sales and over 50 per cent increase in radio sales.

Starting Right Now, with Our Christmas Selling,

Let's Cut Out "Courtesy Discounts"

United Action Required by Manufacturers, Jobbers, Central Stations and Dealers to Purge the Electrical Industry of this Evil—How Other Trades Have Solved Indiscriminate Granting of "Special Prices" to Consumers

By ROLAND COLE

EVERY time a retail dealer permits a customer to purchase an article of merchandise at a discount from the regular retail selling price, that retailer has done something which is unfair to himself, to his customer, to his jobber, to the manufacturer of the article, to every other retailer, to his own employees, to his town and to the whole economic structure of business.

Do you doubt that statement?
Listen to what one retail dealer

"I'm a retailer. I pay real money for rent, for salaries and other expenses. My store is a convenience to the public. If that were not so, my customers would buy direct from the makers or from the mail order houses.

"Why do they buy from me? Because I know them and they know me. I've been here for nine years. I do business with some of my own customers, who sell me hats, shoesdrugs, coal and insurance. I pay rent, taxes and vote in this town. I am on the spot all the time.

"My customers buy from me because my store is convenient to them. I keep the store open and employ sales people to be here. I have invested a lot of money in stock and equipment. Customers come in and inspect my stock before they buy it. I provide conveniences for that purpose. Many ask for credit accommodation and for delivery service. In exchange for these conveniences and advantages, I ask my customers to pay the regular retail price.

"I would not think it fair if one of the manufacturers whose goods I handle should sell an article to a customer of mine direct at the whole-

sale price. I would object to that because the manufacturer does not take my risks or contribute to my expenses.

When the Retailer Sells at a Trade Discount

"If I sell my goods to consumers at wholesale prices, I am dishonest. I have cheated myself by throwing away a legitimate profit. I have deceived the jobber and manufacturer who sold me their goods at wholesale because they expected me to sell them again at retail, make a profit and stay in business to build up their business and my business. have injured other retailers and allowed the customer to possess himself of a gold dollar for seventy-five cents. If I keep that up, I can't pay my bills, and ought to be put in jail for giving away valuable merchandise which I bought to sell at a

Perhaps the reader will think that the dealer whose remarks have just been quoted, puts the case a little strong.

From Florida

"The majority of people in this city seem to be directly related to some one in the electrical business. They all speak of trade discounts, and become very much offended when advised that we are unable to grant them. There is nothing that could be of more help to the struggling electrical dealer than the education of the public to a different viewpoint in this matter."

He hasn't put it half strong enough.

One of the evils that is gnawing at the vitals of the electrical business today is the widespread practice which prevails among wholesale and retail dealers in electrical appliances of selling goods to the consuming public at less than regular retail selling prices.

Everybody in the electrical business is to blame for the present con-The evil is widespread, dition. appalling in its magnitude and ominous in its consequences. Efforts to curb it are at present sporadic, fitful and ineffectual. United action on an industry-wide scope is imperative. The retailer is the biggest sinner and the greatest sufferer, only because there are so many of Manufacturers are just as him. culpable. Jobbers and public service companies protest against the evil consequences of the practice but are powerless, they say, to stop it, and instead of making any determined effort to kill the disease at its source, they shake their heads, think of something else, and trust to time or the "other fellow," to start the reform.

It is only a waste of time to cite examples. There is not a man in the electrical business today but knows how sickeningly easy it is for anybody to walk into a retail electric shop almost anywhere and buy an appliance at a discount from the retail price. He can do it in any one of a dozen different ways—by claiming to be in the business himself, or to be a relative of someone well-known in the industry, or the relative of a relative, or the dearly beloved friend of a friend; or if all other arguments fail, he can obtain

a purchase order or requisition from do the industry immeasurable harm. the company he works for and buy the article, as for the company, and persuade the dealer to let him have it at a "trade discount."

Cheating the Retailer of His Profit

A friend of the author wanted an electric vibrator for his wife. Honest in all other things, he nevertheless thought it would be shrewd to eliminate the retailer's profit if he could. He dropped into the store of the largest retailer in town, asked for the proprietor, and told him the following story:

"How's business? I understand it's not so good. A friend of mine is sales manager of a concern which manufactures heating devices. Who? -Johnson? Sure! Do you know him too? Nice fellow. Well, when-

From Illinois

"Courtesy discounts are the pests of the electrical dealer's life. We believe the source of much of this trouble is with the manufacturers.... It may be no worse in the electrical industry than it is in the grocery or clothing business, but we believe it is one of the things that tend to demoralize business more than anything we know of. We are certainly sick of hearing "What's the discount?" "

ever I want anything electrical, I get it through him at the wholesale price."

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Fifteen minutes later he walked out with a vibrator which the retailer let him have at wholesale rather than lose a sale.

It's being done every day.

What's dishonest about it? The principal reason it is dishonest is that the spread between the wholesale and retail price is an amount of money that represents the retailer's legitimate expenses and profit. It was unfairly taken away from him. If we all agree that it is dishonest, what can be done to stop it?

An Example from Another Field

Plenty. In fact, everything can be done that honest people want to do to wipe out a practice which, if allowed to continue, will wipe out of business a lot of honest people and

In the first place, other industries have had to deal with the evil and many of them have successfully stamped it out.

There was a time when anybody who lived in Rochester, New York, or anybody who had a friend living there, could buy a Kodak at the wholesale price through any employee of the company or through a relative who worked for a retailer.

The Eastman Kodak Company was born in Rochester. It is an industry of which the city is proud. The original slogan of the company, "You press the button, we do the rest," took hold of Rochester years ago and warmed the imagination of its citizens. Young people eagerly sought employment with the company. The company grew rapidly and gave employment to hundreds and, in time, to thousands of Rochester people.

Buying at Less Than Retail Eliminates the Retailer

Of course, they all wanted Kodaks. Being employees, they were allowed to purchase them at wholesale. Then brothers, sisters, cousins and aunts, wanted Kodaks. Soon more distant relatives, friends, acquaintances and perfect but utter strangers, wanted Kodaks. Eastman employees became good customers and absorbed a considerable volume of the factory's output. Local retailers, however, became very poor customers, and many of them ceased being customers altogether.

It wasn't long before the company took drastic action. Today, an Eastman employee may buy a Kodak for his own use, but not at the wholesale price. He is allowed a small discount-something like 20 per cent. He states, when he buys, that he is buying for his own personal use and agrees not to give or sell the Kodak to another person. His purchases are recorded, by date. If he is detected in the act of buying for others, the privilege of again buying is withdrawn. Any flagrant misuse of his prerogative will result in his dismissal.

The result is that today the retailers of Rochester do a thriving and profitable business in Kodaks. Friends and relatives of employees and local retailers do not ask to buy at a discount. They have learned that it can't be done.

Only a few years ago the piano industry had this evil to deal with

From California

"'Electrical Merchandising' has hit on the most serious evil in the electrical industry today. There is no other line of goods in which the retailer has to compete with the wholesaler to the same extent as he does in the electrical industry. Every employee of every electrical concern in town carries on a small merchandising business of his own, buying goods at wholesale prices and passing them on to his friends. Besides that, there is not a jobber in town who will not sell at wholesale prices, if you will approach him with cash."

in a particularly aggravating form. It began when the manufacturers allowed their employees to purchase pianos for their own use at factory and wholesale prices. They soon discovered that many employees were doing a business of their own on the side. An employee would solicit his neighbors and friends in spare time, secure an order and buy a piano for himself. It was delivered from the factory to his own home and later transferred to the home of the buyer.

Pianos are sold to retail dealers on an exclusive agency basis. Every piano bears a factory number on its sound-board and this number is used in billing. Therefore it is not difficult to trace a piano to its source where the factory number can be obtained. When a retailer found a piano in a customer's home he could obtain the number and ascertain from the factory the name of the person to whom it had been sold. When the piano manufacturers discovered they were permitting their own employees to compete with their retailers, the sale of pianos to employees was regulated so that employees could not buy except for their own personal use. A record of every sale, with the number of the piano, is now kept of all sales made to employees, and no employee can buy for re-sale.

In the hardware field, which in a way parallels the electrical field, the practice of selling goods to the public below retail prices does not exist.

L. S. Soule, editor of Hardware

ever existed in the hardware field, primarily because of the splendid trade organization work which has been going on for years among our retailers, jobbers and manufacturers. We have the American Hardware Manufacturers' Association, the Southern Hardware Jobbers' Association, the National Hardware Jobbers' Association and the National Retail Hardware Association. The latter organization has about 22,000 members. These organizations frequently hold their meetings together which affords opportunity for discussion among all factors in the field, and complaints and trade abuses are aired and discussed with satisfaction to all concerned. I am not saying we do not have our troubles. We do. Retailers often complain of jobbers who do a retail But that is different. Where a jobber sells at retail, he has a retail store or department and the customer buys at the regular retail price."

Sporting Goods and Office Specialties

An official of an arms manufacturing company said: "Years ago when I occupied a clerical position at our factory, I wanted to buy a shot-gun at the factory price for a friend of mine. I spoke to my chief, who is now the president of our company. He firmly but kindly turned me down and suggested that I have my friend go to the local retailer and buy at the regular retail price."

In the field of office specialties, such as desks, filing cabinets, typewriters, adding and calculating machines, the practice is unknown.

"Take the typewriter field as an example," said a man who has been in that industry almost since it started. "Every consumer-purchaser of a typewriter is rated as a onemachine user or a quantity-machine user, at an established and published list of discounts. If a concern uses a certain number of machines, they are entitled to a certain discount from list. Should an employee of that concern go to a retailer and ask to buy a typewriter at a discount from list, the dealer would merely laugh at him. He would tell him frankly that if he wanted to get a typewriter for his own use at the company discount, it would be up to the company to decide whether it wanted to extend that courtesy

Age, says: "I don't think the evil to him. The company would have to ated. I do everything possible to order the machine in the regular way and the typewriter company would deliver and bill it to the company at the discount to which it was entitled. Then if the company saw fit to let the employee have the machine at the same discount, that was a matter for the company to decide. But there is no such thing in the office specialty field, that I know of, as selling goods direct to the user at a discount from the retail price."

Max Englander, president of the Englander Spring Bed Company,

From New York

"What chance has the electrical dealer in competition with his own manufacturer who insists on furnishing employees with appliances at cost? The dealer gives the demonstrations and pays all the expenses of a place of business, sales help, advertising, etc. He does everything but get the order, for as soon as the prospective buyer has made up his mind about what he really wants, he calls on some friend in the electrical business to get it for him at cost from the manufacturer. This cannot go on much longer if the legitimate appliance dealer is to remain in the game."

one of the largest manufacturers of metal beds and springs, said:

"The history of the metal bed, bed-spring and mattress industry has been undermined for years by the practice of selling the consumer at wholesale and factory prices. The retailer has not been at fault, but the manufacturer and wholesaler. This has been due to the fact that almost anybody can become a manufacturer in our line with a capital of no more than \$500. Hundreds of backyard and one-room manufacturers have sprung up in the larger cities of the country.

"There are a number of large and reputable manufacturers who have never indulged in this practice. During the 32 years that I have been in business I have refused to sell my goods in any way but through retail dealers, except in localities where no dealers are situ-

help and encourage my retailers, and so do other first class manufacturers in my line, like The Simmons Company. I have never heard of a case where the retailer sold my product to a customer at wholesale. I don't think that condition exists as a trade practice."

"Accommodating" a Furniture-**Buying Friend**

Household furniture is a field in which selling at factory and wholesale prices has been an industry-old practice because of the nature of the product. It is a bulky and slowmoving article. Almost all first class retail establishments hold August and February "sales," at which prices are cut to move merchandise. Stock is frequently marked up at two prices, one for cash and the other for time. Dealers moreover have been known to accommodate their friends by sending them to the factory or a wholesaler with a "card" to enable them to buy at the wholesale price.

There has been established in New York a "New York Furniture Exchange Association" for wholesalers and manufacturers or their representatives, the purpose of which is "to foster and promote the interest and general welfare of the furniture industry" by maintaining a standard of membership so high as to act as a guarantee of good faith for carrying out the policies of conducting business on a strictly wholesale plan; and to demand and enforce the fullest support of retail furniture dealers by securing their closest cooperation in turn against wholesalers conducting business in a manner disapproved by the association.

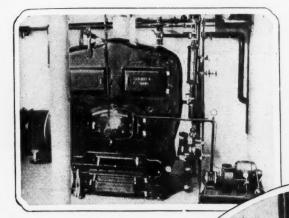
About 80 per cent of the wholesalers in the Metropolitan district of New York are members of this association. Members agree not to sell at retail and members who do so are immediately dropped from the association.

Many other examples could be cited. Enough evidence has been presented, however, to show that the condition which prevails in the electrical industry may be corrected as it has been done away with in other fields.

Such solutions in other industries will be described in detail in the second installment of Mr. Cole's article, appearing in the January issue of Electrical Merchandising.

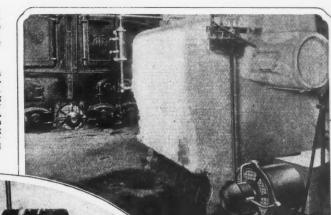
Electrical Equipment to Feed the Furnace

A pictorial review of some of the many domestic oil-burning and coal-saving outfits now on the market to meet the popular demand for soot-less, dustless, labor-less, home-heating plants



No changes of a permanent nature are necessary in the boiler to install the "Marvel" burner shown at the left.

To the right is shown a "forced draft" installation made by the L. J. Wing Manufacturing Company, in a New York apartment house. No. 2 buckwheat coal is used, thereby effecting a saving of \$8.10 per ton over the kind of coal previously used.



Every automobile driver is familiar with the name "Socony." The oil burner to the right is made by the Socony Burner Corporation, Brooklyn, N. Y.

A thermostat in an upstairs room controls the burner shown below, turning it on or off as beat requirements demand. It is a "Baby" burner, made by the W. S. Ray Manufacturing Company, San Francisco, Cal.

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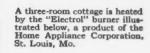
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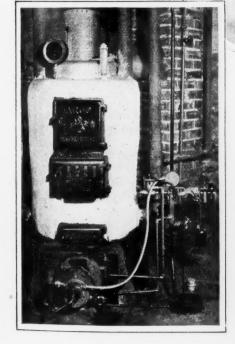
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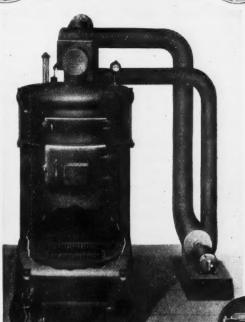
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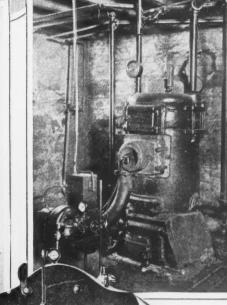
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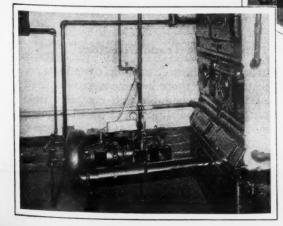
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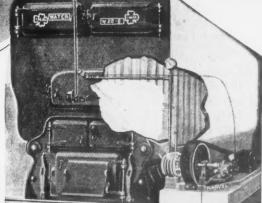




"Inducto" is the name of a recent development announced by the Anthracite Economies Company, Philadelphia. As its name implies, the "Inducto" employs the induced draft principle, using for this purpose a "Sirocco" blower.

Any good heating plant, steam, vapor, hot water or hot air will operate successfully with an oil burner similar to the one shown at the left, the "Oil-O-Matic" of C. U. Williams & Son, Bloomington, Ill.

A \(\frac{1}{2}\)-hp, motor operates the oil burner shown at the right, made by the Oil Heater Distributing Company, New York City.











First 1919

With the removal of war-time restrictions, **Rectrical Merchandising* was first to push "wireless" as merchandise. Attention of the contractor-desir was called to the 500 per cent increase in radio fans.

1920

"Get Ready for the Radio Rush!" Articles on how to install radio departments. Getting the help of the "wireless" amateur on setting up an antenna and receiving set in the dealer's store.

1921

First listing of what radio enthusiasts buy. Practical sales articles, showing the dealer what 'the passing of the coherer and coming of the regenerative sets with audio amplification, meant to him in dollars and cents.

1922

Combating Inspector's Interference with free development of radio. Listing of broadcasting stations. "Broadcasting" one electric wires. "How to Retail Redio," Electrical Merchandising's manual on saling radio—first of its kind.

And Now the McGraw-Hill Co. Announces Radio

McGraw-Hill's Service to Radio, from Pioneer Days to the Present

ROM the very lifting of the "wireless ban" at the close of the War, down to the present phenomenal development of radio, the publications of the McGraw-Hill Company have taken positions of leadership in pointing the way, on the one hand for the greater technical development of radio,—and on the other, for the most effective marketing of radio equipment.

Radio is, of course, the offspring of the electrical industry, and the needs of the new department of electrical science have been cased for from the beginning, on the technical side, by *Electrical World* and the *Journal of Electricity*, the McGraw-Hill publications at New York and San Francisco.

The First Issue of a Trade Magazine Largely Devoted to Radio Selling, 1920

Electrical Merchandising, the McGraw-Hill magazine of the electrical trade, early took up the promotion of radio sales, and its files contain articles on this subject back even before the United States' entry into the War. In 1918, it will be remembered, the government shut down all radio amateur outfits.

But with the lifting of the federal restrictions in 1919, Electrical Merchandising brought prominently before the electrical trade the importance of radio as a merchandising line. Shortly afterward, in 1920, it began to feature radio articles, one issue in particular, that for July 1920, being largely given over to radio merchandising topics.

With the growth of radio broadcasting in 1922, radio subjects logically came to occupy a larger and larger place in the pages of *Electrical Merchandising*, carrying each month the message of radio selling to 15,000 electrical dealers.

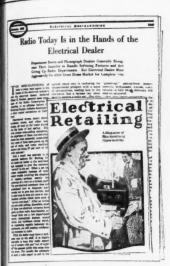
"How to Retail Radio"—the First Book on Merchandising Radio 1922

In the same year, there was also prepared and issued by *Electrical Merchandising* the first book on marketing radio goods. This was a 200-page volume "How to Retail Radio," a pioneer book which then filled and still fills a great need of the radio retailer.

Meanwhile the spreading of the sales of both electrical appliances and radio into classes of outlets outside the strictly electrical trade—into hardware stores, music stores, drug stores, sporting-goods stores, etc., had been observed with interest by the publishers of Electrical Merchandising. As the result, in 1923 Electrical Retailing was acquired, and reshaped into a magazine to serve these "non-electrical" merchants with information on electrical appliances and radio sales methods. This move added another great separate group of 30,000 retailers carrying radio.

In 1924, the "Radio Trade Directory"

With the increasing complexity of radio manufacturing and radio distribution, there became apparent the need for tabulations of dependable and complete information on sources of radio supply and on wholesale and retail radio outlets.



Field

HERENAL THURSDAY



1923

Radio wiring for homes and hotels—a prophetic suggestion for greater radio enjoyment. Also, development of Electrical Retailing into a magazine to reach 30,900 oulets for electrical and radio products.

1924

Articles promoting better radio merchandising methods. House-to-house sales; time payment; farm radio market, First appearance of McGraw-Hill "Radio Trade Directory," giving complete listing of manufacturers of sets and equipment.

Retailing"

Again the McGraw-Hill Company accepted the responsibility of industrial publishing leadership and organized a directory department under expert supervision. This directory organization has just brought out, after six months' intensive compilation, the new McGraw-Hill Radio Trade Directory, listing all manufacturers of radio sets, parts, accessories and equipment.

Reach Each Month a Vast Audience of 45,000 Dealers

With Electrical Merchandising going each month to 15,000 electrical dealers, with its radio message, and Electrical Retailing selling the radio idea to another great group of 30,000 hardware stores, music stores, drug stores, sporting goods stores, etc., it was evident that taken together, these magazines reached the largest trade audience of retail radio sellers ever assembled by any publishing organization—a total audience of 45,000 copies, many times that of other trade magazines.

To serve more completely, therefore, this vast army of readers, it is now the purpose to combine the radio material, both text and advertising, from *Electrical Merchandising* and *Electrical Retailing*, and to expand and augment this into a complete radio magazine supplement in pocket-size, to be issued with both papers—*Radio Retailing*, reaching monthly 45,000 dealers who sell radio.

"Radio Retailing" Will Appear January Second

1925

A complete radio merchandising magazine supplement for all radio dealers—reaching monthly the 45,000 readers of Electrical Merchandising and Electrical Retailing. Beginning January.

 J_{anuary} 2nd 1925

The new Radio Retailing supplement will appear with the January numbers of the two magazines. Beginning with January, the subscriber to Electrical Merchandising will receive Radio Retailing as a section of his regular magazines.

Similarly the readers of *Electrical Retailing* will receive *Radio Retailing* as Section Two of his own handy pocket-size electrical sales counsellor.

Radio Retailing will mark a new high standard of information service for all dealers who sell radio. Built upon McGraw-Hill standards of publishing and editorial service which have made Electrical Merchandising and Electrical Retailing outstanding publications in the annals of trade journalism, Radio Retailing will be developed into a great merchandising service for this newest and greatest of the electrical arts.

Authoritative articles will discuss the problems which affect radio selling today; the latest news of the radio field will be reported, together with accounts of all new radio products on the market; the best merchandising methods and ideas will be described in detail, particularly practices in time-payment purchase plans; house-to-house selling; advertising, window displays, etc., etc.

Watch for the first issue of Radio Retailing which will be delivered to you as Section Two of next month's Electrical Merchandising,—that for January, 1925.

Plumbers Add 100 per Cent to Labor and Material for Base Price

From This "100 per Cent List Price" Discounts Are Applied, Depending on Size of Job and Profit Rate Desired—Other Development Work of Plumbing Trade Extension Bureau

cal contractor-dealers' problems, tractor is frequently referred to as an example of a similar business enjoying larger profits. The master plumber or heating contractor gets more of the total money spent on a

Total Amount of Labor

& Material on Job or Sale Figured at 100%

N CONVENTION, round-table or home. The money spent on a bath personal discussions of the electri- room, for instance, is often several times that spent on the complete wirthe master plumber or heating con- ing and lighting-fixture installation, and the master plumber makes, so it is believed, more money than the electrical contractor in the mechanical end of the job.

Bidding on contracts, selling fix-

\$50.

\$100.

tures, making prices, figuring overhead, finding the cost on jobs that include labor and material-in all these things the master plumber or heating contractor and the electrical contractor-dealer have the same business problems. If the master plumber has found the solution he can point the way to the electrical contractor.

Has he found the answer? What are the facts about the master plumber?

After studying the cases of the master plumber and heating contractor in the offices of an admirable organization, the National Trade Expansion Bureau of the Plumbing and Heating Industries, at Evansville, Ind., our impression is that the situation of the master plumber or heating contractor is much the situation of the electrical contractor-dealer and that many of the same remedies are being applied in both the plumbing, heating and electrical industry.

\$100.

\$500.

1			P	ROFIT D	ESTRED	ON SEL	ring p	RICE.		
	Volume	Overhead % on Sell-	5%	71%	10%	121%	15%	18%	20%	25%
A	Sales. 7500	ing Price	22	20	17	13	9	5	List	+11%
В	10000	291	23	21	17	14	10	5	1	+10%
C	15000	281	25	22	18	15	11	7	3	+ 7枚
D	20000	28	26	23	19	16	12	7	5	+ 66%
E	25000	27	26	23	21	17	14	9	6	+ %
F	35000	261	27	24	21	18	15	10	7	+ 3%
æ G	50000	26	28	25	< 22	19	15	11	7	+ 2% 4
Ga	60000	25	29	26	23	20	17	12	9	List
ФD	65000	24	30	27	24	21	18	14	11	2
Н	75000	23	31	28	25	22	19	15	12	5
Ha	85000	22	32	29	26	23	21	17	14	7
Hb	90000	21	33	30	28	24	22	18	15	7
I	100000	20	33	31	29	25	22	19	17	9
, Ia	110000	19	34	32	30	26	24	21	18	11
Ib	120000	18	35	33	31	28	25	22	19	12
Ie	130000	17	36	34	32	29	26	22	21	14
Id	140000	16	37	35	33	30	28	24	22	15
J	150000	15	38	35	33	31	29	25	22	17
Ja	175000	14	39	36	34	32	30	26	24	18
K	200000	131	39	36	35	33	30	26	25	19
Ka	225000	13	39	37	35	33	31	28	25	19
υL	25000	0 12	39	37	35	33	31	28	25	20
M	30000	0 111	40	38	36	34	32	29	26	21

How the Plumber Figures His Selling Price for Jobs

\$5000. \$5000. \$2000. \$1000.

\$2000. \$1000. \$500.

First he doubles the cost of all labor and material items. Then from the "100% list price" thus obtained, he applies one of the

above suggested discounts, depending on the size of the job, the yearly volume of his own business, and the desired rate of profit.

Scope and Functions of the T. E. B.

The organization referred to, known familiarly as T. E. B., combines the functions of both our Society for Electrical Development and Association of Electragists. International. It is like the Society in that it serves and is maintained by the entire industry, manufacturers and jobbers, as well as the National Association of Master Plumbers and the heating and piping contractors' National Association. And like the Electragists, International it is gathering statistics, making studies and offering standard accounting systems and field help.

The T. E. B. is doing a valuable work in helping the master plumber or heating contractor in sales promotion work, advertising, sales helps, store planning and window display. As the organization is but five years old the service on these lines has not

yet attained the scope of the work being done by the Society for Electrical Development.

It is in its retail-trade studies, estimating and pricing recommendations, and accounting service, that the work of the T. E. B. is most noteworthy from an electrical point of view.

There are approximately 26,000 master plumbers in the United States and the average life of a plumbing business is five years. The average yearly business of these 26,000 master plumbers is \$25,000.

This average business is operated on a capital of \$4,000. The owner's cash capital is \$2,500 to which is added \$1,500 of borrowed capital. The total of fixed charges, operating cost or overhead on this average business is \$6,783 or 27.1 per cent on the gross.

From thousands of questionnaires the T. E. B. has gathered figures on the cost of doing business on yearly volumes of from \$7,500 to \$250,000. These are shown in tabulated form in the accompanying table.

Chart Shows Discounts from List

These figures on overhead were used as the basis for another chart showing suggested discounts from a 100 per cent list. This chart enables the master plumber of any size to see exactly how much he will have to get for his job if he is to have a net profit after covering all overhead.

The 100 per cent list is the recommended basis for all price figuring in the plumbing trades. It is the actual cost of all labor, material and fixtures totaled and doubled. In other words, a 100 per cent increase over the cost. With this 100 per cent list as a basis the master plumber offers a discount according to the size of the job. This chart shows him that the discount must also be according to the size of his yearly business.

The following example will make this clear.

Example of charge:

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ole er rops,

ay. irs

ot

Pro or otter Po.	
	100 per cent
Cost	list
1 lavatory\$15	\$30
1 pr. faucets 5	10
1 trap 6	12
Labor four hours 4	8
. –	
\$30	\$60
Discount 9 per cent (Average plumber)	5.40
Net selling price Now the condition in	\$54.60 the plumb-

Lessons the Electrical Trade Can Learn from Other Businesses

Plumbing, as an installation business conducted on a contract basis, parallels in many ways electrical contracting. The accompanying study of plumbing business practices—and especially the analysis of 12 successful businesses on the following page—contains many interesting lessons for the electrical trade.

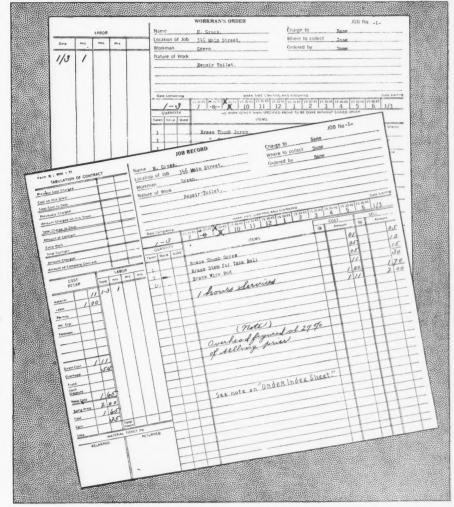
ing trades is very much like that in the electrical contracting field. The curbstone plumber exists who denies that he has an overhead because he operates from his home and does all or most of the work himself. The

great educational value of this tabulation is the warning it carries to this man that if he does only \$7,500 a year not only has he an overhead but his overhead is actually the highest in the whole trade. If he is to survive he cannot quote prices as low as his larger competitors, he must get full 100 per cent list or higher on small jobs.

The answer for the small master plumber or heating contractor, as for the small electrical contractor, is the same. He should stay out of the competitive field and build up a business by selling every job at a price that covers a fair profit.

This chart is of equal use to the larger contractor who should know how cheaply his competitor can do the work and regulate his selling price accordingly. Small sales and jobs cost proportionately more money to handle and must pay for this difference before they can pay a profit.

The first step in making a business pay is a proper bookkeeping system.



The National Trade Expansion Bureau of the Plumbing and Heating Industries has developed for its members the two forms reproduced above. The workman's order shows material drawn and returned, time spent on the job and any expenses incurred. Cost and selling price are indicated on the job record and a "cost recap" shows material and labor as well as overhead. All elements of cost and expense are here.

Earnings and Operating Costs of Twelve Successful Plumbing Businesses Revised and Copyrighted 1924 by the National Trade Extension Bureau, Evansville, Ind.

Column	1	2	3	4	5	6	7	8	9	10	11	12
olume of Business for Year	7,500	10,000	15,000	20,000	25,000	35,000	50,000	75,000	100,000	150,000	200,000	250,000
wners' Capital	750	1,000	1,500	2,000	2,500	3,500	5,000	7,500	10,000	10,000	12,000	15,000
orrowed Capital	425	675	850	1,000	1,500	2,000	3,000	4,000	4,000	5,000	5,000	6,000
verhead Accounts												
lisc. Office Expense (Sundries)	8	10	15	20	25	35	50	75	100	150	200	25
oflections		(by t	he use of	Cash Dis	count and	Trade A	cceptance,	this item	can be e	liminated)		
icense Fee	5	5	5	5	5	5	5	5	5	5	5	
elephone and Telegraph	65	75	100	125	125	125	125	135	145	145	150	16
ight, Heat, Power and Water	15	20	25	50	60	60	65	75	100	100	125	12
tationery, Printing and Postage	22	35	55	70	85	110	150	190	235	275	320	36
Trade Papers, Business Magazines	5	5	5	5	5	7	9	10	12	12	15	1
Fraveling Expense (Conventions, Soliciting, Buying).	50	60	1 75	100	125	150	200	250	275	300	325	35
Office Salaries (Owner)	750	1,000	1,200	1,500	1,800	2,000	2,000	2,500	3,000	4,000	5,000	6,50
Stenographer	350	500	600	600	700	750	750	1,000	1,000	1,000	1,200	1,50
Bookkeeper				600	700	1,200	1,500	1,800	2,000	2,000	2,000	2,40
Estimator							1,800	2,400	2,500	2,800	2,800	3,0
Auto Expense (Supt. and Owner's Business Cars)			360	375	400	700	700	800	1,000	1,000	1,000	1,00
Truck or Wagon Expense (Including driver, where charges are made for such services per trip).	350	280	425	360	406	528	2 Trucks 2 608	Trucks	2 Trucks 600	3 Trucks 1,125	2 Trucks	True 8
Depreciation of Wagons, Autos and Trucks.	25	50	75	100	200	300	400	600	600	900	1,000	1,0
Insurance (On Horses or Truck, where charges are made for such services per trip)	3	6	12	12	15	25	50	70	125	150	150	1
Advertising and Donations	110	150	225	285	325	375	450	600	750	900	1,050	1,2
Dues (Associated Plumbers and Steam Fitters)	36	36	36	50	50	50	50	50	50	50	50	
(Chamber of Commerce)		25	25	25	25	25	25	25	25	25	25	
(Other Commercial and Civic Organiz- ations)						15	25	35	45	50	65	
Interest on Owners' Capital	52	70	105	140	155	245	350	524	700	700	840	1,6
Interest on Borrowed Money	26	35	52	70	105	140	210	280	280	350	350	
Legal Expense				10	15	25	30	40	50	75	100	1
Taxes (City, State and County)	15	30	40	50	70	100	150	225	250	275	350	
Misc. Store Expense	3	5	5	10	12	15	20	25	40	65	75	
Allowances and Bad Accounts	37	50	75	100	125	150	200	300	400	500	500	
Non-Productive Labor (Labor Not Chargeable)	8	10	15	20	25	35	50	75	100	150	200	
Foreman (Where 3 of Foreman's time is charged as productive labor)						625	625	625	62	625	1,250	
Stockman							600	1,000	1,50	1,800	1,800	
Fire Insurance	5	9	11	15	19	26	37	56	7	5 100	150	-
Liability Insurance	8	64	128	128	184	128	192	192	25	6 250	6 320	
Business Insurance	37	50	75	100	125	17:	250	375	50	0 600	700	
Rent (Shop and Warehouse, Garage and Yard)	180	240	300	480	600	786	1,000	1,500	1,50	0 1,80	2,000	2
Depreciation (Stock, Equipment and Buildings)	50	50	75	100	100	7	5 100	150	25	0 35	0 500	
Damaged Material	4	5	7	10	12		-	4	5 6	0 6	5 100)
Tools (Repairs and Depreciation)	15	20	30	40			200					-
Workmen's Comp. Ins. (Based on Journeymen at \$9 00 per day)	110 dys. 24	275 dys. 41	73 to 100 dys.	665 dys.			8. 1,220 dys. 7 179					
Misc. Shop Expense	5	5	10	10	13	2	0 30	5	0 (60 6	7	5
Oil, Candles, Paint, Gasoline, etc		(These	items are	merchan	dise, and s	should be	charged to	o the indi	vidual jo	b requirin	g them)	
Total of Fixed Charge or Operating Cost	2,263	2,941	4,239	5,663	6,783	9,23	13,115	17,00	9 19,8	23,59	26,84	2 31
Percentage of Overhead (To be added to the cost of labor and material)	49.7%	47.8%	45.1%	45.2%	42.5%	40.89	76 40.5%	33.39	70 27.9	% 20.9	% 17.39	6 1
Percentage of Overhead (Based on sale price)	30.2%	29.4%	28.3%	28.3%	27.1%	26.49	% 26.2%	22.79	76 19.8	% 15.79	% 13.49	6 1
Discount (That can be given from 100% list to make 10% profit)	17.6%	18.7%	20.2%	20.2%	21.6%	22.5	% 22.7%	26.79	% 29.6	% 33.5	% 35.59	76 3
Discount (That can be given from 100% list to make 10% profit if 5% is allowed for cash)	13.4%	14.4%	16%	15.9%	17.5%	18.5	% 18.6%	22.80	25.9	% 30	% 32.69	
	+5%	+5%	+5%	+5%	+5%	+5%	+5%	+5%	+5%	+5%	+5%	1

In the simplified but very complete bookkeeping system developed by the T. E. B. the job record and workman order pad are of greatest interest. This pad consists of 50 white job record blanks bound up with 50 yellow workman's order sheets. Making out the job record makes out also the duplicate work order.

The work order is torn out and given to the workman. The job record is completed from the work order which when turned in shows material drawn and returned, time spent on the job and any expenses incurred. Cost and selling price are shown on the job record and a "cost recap" shows not only material and labor cost but overhead. This overhead is figured on the selling price at the rate determined by yearly volume as shown on the T. E. B. chart.

Journal posting is made from this recap and the job record bound into the pad and indexed is the permanent original record.

This job record and work order can be used with any bookkeeping system. That it is used and appreciated is shown by the fact that 5,000 plumbing or heating firms are using these forms regularly against 2,000 who have adopted the entire system.

250

225

320

800

500 800 125

500 dys. 815

100

.075

2.4%

The T. E. B. publishes a short course in accounting which together with the forms furnished has enabled many a small plumber to keep a complete and accurate set of books in a few hours a week.

Local Plumbers' Associations Teach Accounting

Local master plumbers or heating contractors associations have a relatively high percentage of membership. Seventy per cent of local master plumbers is a usual membership. The heating contractors are not so well organized in all cities. These local associations have formed classes and are teaching the accounting system and studying overhead and other business problems using the material supplied by the T. E. B. The accounting division maintains one field man who travels, teaching and lecturing on the accounting system.

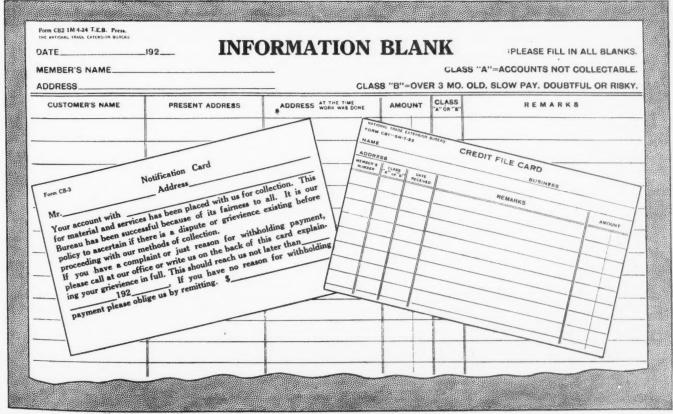
In addition, some of the local organizations have sent the secretaries to Evansville to study the system there in order to teach it at home. For example, in Birmingham, Ala., the local secretary is commencing a night school on the accounting system. This is held by co-operation of the Birmingham Board of Education in one of the public schools. The

classes are open and non-association members are welcomed.

Having covered overhead, pricing and accounting, the last link in the profit process is collections. And a complete collection system is furnished the local master plumbers' or heating contractors' associations.

That these services have benefited the plumbing and heating trades and the master plumbers and heating contractors is best shown by the increasing support of the Trade Extension Bureau. The National Association of Master Plumbers is furnishing fifteen times as much money as formerly. The total support has grown from \$25,000 in 1919 to \$150,000 in 1923.

Store operating costs in the hardware field were given in detail on page 4583 of our September issue, and other retail fields are analyzed on page 4777 of the current issue. Central-station merchandising costs, fixture selling costs, dealer expenses, etc., have been given in past issues, and now "Electrical Merchandising" is undertaking a comprehensive study of merchandising costs in the electrical field under the direction of L. A. Hansen, associate editor, and formerly with the U. S. Department of Commerce at Washington.



Each master plumber or heating contractor is sent monthly an information blank whereon he lists his delinquent accounts. These are then mailed back to the association secretary who transfers this information to a credit card file and mails also a

notification card to the debtor. This card states that his account has been placed with the association for collection. If this debtor has a complaint or reason for not paying he is asked to take it up with the association. The secretary investigates all

complaints and if unable to effect a settlement is empowered to call a board of orbitration whose finding is final. If no complaint develops the associations pursues a regular collection routine clear through to legal action if necessary.

Some Lessons of Appliance



REALIZING that electrical appliances consume no electricity while out of order and that repair troubles discourage sales of other appliances, the Detroit Edison Company has built up a huge repair business and has gone to unusual lengths to give its customers exceptional service in this respect.

Repair jobs and service calls made by this company during 1923 numbered 173,928; for the first six months of 1924 they were 90,719, and for the one month of August, last, they reached the high mark of 19,169, an increase of 1,695 over the corresponding month of last year.

Of the repair and service calls made in August, 15,772 were repair jobs done in the shop and stations of the company, 2,472 were calls made in homes for the purpose of repairing domestic appliances there, 87 were motor calls, 223 were for making repairs on electric ranges, 42 for repairs on washing machines, and 573 were miscellaneous trouble calls; a total of 3,397 calls in homes or places of business.

As might be expected, the Detroit central station has, as a result of doing so much repair work, learned

many things concerning the kinds of appliances that require most frequent attention, the weaknesses of appliances generally, causes of breakdowns, methods used by the average housewife, and the attitude of the people generally toward electrical appliances.

An analysis of repairs and service calls is made each month, showing the number of repairs of each kind made and the number and kind of calls made by outside service men, thus indicating at a glance the weaknesses of appliances and parts of different kinds.

Appliance cords, it is found, cause the housewife more trouble than anything else electrical and constitute by far the largest number of repairs made in the shop of the Detroit central station. No less than 13,392 of the 15,772 such repairs made in August were of appliance cords.

Other repairs were classified as

Domestic irons, 1,134. Curling irons, 611. Toasters, 360. Sweepers, 78. Percolators, 76. By D. G. BAIRD

Sewing machines, 31 Tailor irons, 30. Air heaters, 23. Warming pads, 17. Vibrators, 11. Hair dryers, 9.

Christmas tree lights will average 25 or 30 a day in November and December.

Failure of appliance cords has been found due in some cases to inherent weaknesses, but by far the larger number of such failures are due to carelessness on the part of the user.

Why Appliance Cords Fail

Inherent weaknesses usually are due to the cord's being either too stiff or too pliable, to its being made up of scrap wire, to the brittleness of the bushing, or to the method of attaching the bushing and the plug. If the cord is too stiff, it will break as a result of normal twisting while in use; if it is too pliable, it very likely is composed of too few wires and is, therefore, not strong enough to carry the normal load. A great deal of difficulty is said to have been experienced with one very popular make of domestic iron cord because it was too stiff, but the manufacturer has recently improved his product in this respect.

Many bushings are of a very brittle composition material and will break if dropped on the floor or struck against something. The majority of manufacturers have, however, made considerable improvement in their bushings of late.

Not all cords are as securely attached to terminals as they should be, it is said, with the result that they become disconnected and the housewife doesn't know the cause of the trouble.

Cords have been known to be made of scrap wire, loosely bundled together. No effort is made to repair such cords.

One make of cord has a tendency to break at the point where it enters the bushing spring, due to excessive stiffness of the spring.

Housewives engage in a number of careless practices in handling appliance cords. One is the dropping of the cord when disconnecting it.

Cords, Broken Plugs, and Improper Binding Posts Cause Bulk of 180,000 Repairs Made Annually in Detroit Edison Shops

This frequently cracks or breaks the become corroded and must be to burn out at the "lead" where the bushing. Another is twisting the wire when screwing the plug into a socket, instead of taking hold of the upper part of the plug itself, or better, of screwing the bottom part of the plug into the socket and then inserting the upper, or terminal, por-Many housewives roll up doing so, are very rough and care-The result eventually is a broken cord. Where wall plugs are used, a common practice is to take hold of the cord and jerk the plug from the outlet. This results in jerking the wires loose from the terminals or damaging the insulation. In the latter case, the cord "burns out" the next time it is used. Terminals or terminal guards sometimes become bent, usually as a result of dropping the iron, and in trying to force the connection, the housewife breaks the bushing. Using a broken bushing commonly results in a burnt out cord and a blown fuse.

The majority of repairs on domestic irons are necessitated by leaving the cord attached all the time or by dropping the iron. If the cord is left attached, the terminals eventually

scraped or sandpapered. Dropping terminals connect with the element. the iron may bend the terminals or terminal guard or, more likely and more serious, may break the bushing around the terminals.

Composition Bushings Fragile

What is called a lava bushing is their cords when not in use and in now used around the terminals of most makes of irons and this substance is rather easily cracked or broken. In some makes, particularly, this bushing is very light and is almost invariably cracked when the iron is allowed to fall. The bushing may even work loose and some cord trouble. crumble as a result of the normal connecting and disconnecting of the cord. When this bushing becomes cracked or broken, a short circuit soon occurs, burning out the cord and blowing the fuses of the home. This sometimes so alarms the housewife that she refuses to use any electrical appliance again.

> makes are insulated by mica bushings and are said to be more satisfactory in this respect than are those that have lava bushings.

One make of iron has been found tached to the sockets by means of

In another, the lead-wire is brazed to the element and soon works loose.

Most repairs on curling irons are due to cord trouble, although there are now many cheap curlers on the market that have elements that cannot be repaired or replaced. The elements in some of these are said to be of treated string or cord of some kind.

The elements in toasters burn out in time and must be replaced, but toasters of reliable make usually give satisfactory service. There is

One common cause of trouble with percolators is washing them as if they were coffee pots. This of course grounds them.

There is considerable cord trouble with sweepers and armatures occasionally must be repaired. A common fault is that of using either too much or not enough oil. Some The terminals of irons of some housewives flood them with oil, others use no oil at all.

Cord and rheostat troubles call for repairs on sewing machines. With some makes the cord is at-



The appliance repair shop of the Detroit to appliances and appliance cords, each ord being held by August of this year, Edison Company where thirteen men are year. The peak of this repair business when 19,169 repairs were made. The need employed in making some 180,000 repairs comes during the summer months, the rec-

set screws and is continually breaking off. The insulation between the wires at the terminals, which are close together, is also more or less haphazard, with the result that the machine frequently starts unexpectedly and a nervous housewife becemes afraid to approach it.

Summer Is Peak Period for Appliances

Statistics compiled by the Detroit Edison Company on this repair business indicate that appliances are used more during the hot summer months than at any other time, although the variation is not so great as some might suppose. The number of repairs and service calls made each month for the past year, beginning with September, 1923, will indicate this:

Septemb	е	r						0	۰	٠		۰		۰				٠		٠		0	13,994
October		0					0	0	۰		0	0		٠									16,342
Novembe	er				×																		14,745
Decembe																							
January		0	0	۰			0		٠		۰	0	٠						0	۰	٠		15,327
Februar																							
March							0				0	0			0			0					14,348
April .														0			٠		0				15,925
May					۰	0		0	0		0	0		0	0	0			۰				16,110
June		0			٠	۰						0					۰	0		0			16,041
July		0				۰	0	۰				0		0		0	0						17,448
August					0	a	0	0	0														19,169

The figure for August, 1923, was 17,474.

In considering these statistics, it should be borne in mind that the number of appliances in use in Detroit is increasing rapidly.

This department is maintained as a matter of service and repair charges are made only when material cost is over 50c.—no charge is made for labor.

It was the custom to take in an ap-

Who Does the Appliance-Repair Business in Your Town?

The electricity-using public of every city and town has an appliance-repair problem, as have the good people of Detroit. Meeting this need is a service that the electrical contractor-dealer can supply, with both direct profit to himself, and valuable leads for future sales.

Who does the appliancerepair business in your town?

of making the customer wait till her cord was repaired, give her a repaired one. Hers was then repaired and exchanged for another, and so on. Then repairs began coming in so fast it was impossible to keep a stock of repaired cords on hand to exchange, so the company bought a supply of new ones and now makes a charge of 75c. for a new cord given in exchange for an old one. It is now selling about 100 cords a day at this price. The cords cost considerably more than this, even in 10,000 lots, but the old cord is taken in exchange. No charge is made for exchanging a repaired cord for one in need of repairs unless some part, such as the bushing, is missing. All old cords are sterilized by the formaldehyde process before being repaired.

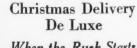
While this repair service has pliance cord for repairs and instead grown to huge proportions and now

entails a considerable expense, J. C. Burton, manager of appliance sales, points out that if some such provision were not made, many appliances would be standing idle and sales of others would be discouraged. It is generally agreed that there are less troubles incident to using electrical appliances in Detroit than in some other cities and this is doubtless due to the fact that the local central station does everything possible to make the use of such appliances a pleasure rather than a nuisance and to allay the fears of housewives as much as possible by keeping her appliances in working order.

Quick Service Brings Good Will and Sales

If, for example, a sewing machine "runs away," and it is not made as easy as possible for the owner to have it repaired, she very likely will vow never to use it again and will advise her friends not to buy an electric sewing machine because "they aren't safe." But when one has merely to disconnect the cord, call up the Edison Company, and have a repairman come right to her home and insulate the wires and terminals so the machine won't behave in such a way again, the same owner thinks "it's a dandy" and not only uses it regularly herself, but advises her friends to buy electric sewing machines also.

Obviously, the Detroit Edison Company's repair service has been of great benefit to the electrical industry in Detroit. When a person knows that he can have such valuable service to help him; he will not hesitate to buy electric appliances.



When the Rush Starts Put Your Personal Car Into Delivery Service

Into Delivery Service

When late orders for electrical Christmas gifts came in in such a quantity as to wreck the regular delivery service, P. H. Booth, district manager of the Edison Electric Appliance Company at Los Angeles made a virtue of a necessity. He loaded his own machine with 1,500 lb. of heating appliances; decorated it on either side with a holly wreath tied with red ribbon and sent it out for Los Angeles delivery. The unusual sight of a personal car loaded in this way, with the pleasant addition of the Christmas wreaths, attracted c on siderable attention.



Things to Think of When You Pick a New Location

How Success of Retail Store Depends on Local Traffic, Kinds of Passersby, Car Lines, and Even Sunlight and Shade

Commerce bulletin "Retail Store Location," prepared under supervision of Lawrence A. Hansen, now editor of "Electrical associateMerchandising."

FTER determining the approximate locality in which location is desired, there are a number of factors influencing the choice of the particular street. The distance of the street from the lines of communication is very important. Usually, in all but the larger cities, the main shopping street is the one traversed by street cars. Street-car lines may serve numerous types of communities. Therefore some analysis should be made of the traffic that the car lines carry. Street cars coming from one district will bring a different class of trade from that brought by cars coming from another district. Then again, it may be desirable not to locate the store on a street with street cars. This might depend on the buying habits and the type of customers. Customers with automobiles may prefer to go to side streets, where there are no street cars, to avoid the traffic. In addition to the street cars, those streets that are traversed by the bus lines are worthy of consideration. frequency of service and the fare of either the street cars or the bus lines will affect their importance with regard to street location.

Many of the present retail districts originated before automobiles were so numerous, and, therefore, many of the streets are not wide enough to afford requisite parking facilities. Most cities have been compelled to make parking restrictions and, no doubt, there will be many more made in the future. Some streets have been made one-way thoroughfares to facilitate the handling of traffic. Both of these facts need to be given consideration in the selection of any street as a location for a store. Due regard should be given to the effect of present and possible future restrictions upon the proposed business. In some businesses the need for space to park

They were prepared by Lawrence A. Hansen, former Assistant Chief, Domestic Commerce Division, U. S. Department of Commerce, and now associate editor of Electrical Merchandising and Electrical Repossible future restrictions upon the proposed business. In some busi-

From the U.S. Department of cars is not so imperative as in others, depending somewhat on the length of time consumed in making purchases.

Somewhat analogous to the restrictions mentioned are the zoning regulations that are made by cities. These regulations probably pertain more to manufacturing industries than to the retail trade. Some of the zones are, however, restricted to residential properties and do not allow merchants to enter. Such districts may be ideal locations for a neighborhood store but, being excluded by law, the distributer must content himself with some other location.

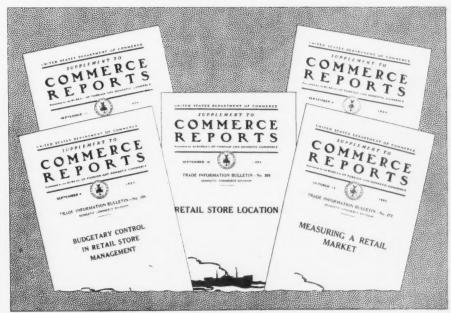
Comparison of Advantages Offered by Different Streets

Some streets offer better advertising advantages than others. This is true not only because there is a greater number of passers-by, but also because some streets may be easier to find than others. The importance of the latter factor would, of course, be in proportion to the amount of trade drawn from the surrounding territory. Often the farm-

ers and other visitors will know only a few streets in a city. Hence the advertising may become more effective when the visiting customer is already familiar with the location of the store.

One side of a street is usually more popular than the other. There may be several reasons for this. If the street is not level, the upper side is usually more traveled than the lower. This may be accounted for by the fact that the upper side of the street is cleaner, or that the human tendency is to get on the upper side of things. Then, again, there is the question of the shady or sunny side of the street. In the summer the preference for the shady side becomes quite marked, and this is especially true for women, who do much of their shopping in the hottest part of the day. Sunlight is always an important factor to be considered in locating a retail store. Shoppers naturally seek the protection of the shady side of the street in the summer, and the sunlight affects the displays that the store makes in its windows. Satisfactory displays are more difficult to make in sunny windows than in those in which the light is controlled or shaded; a bright glare from the outside tends to make a mirror of the plate-glass windows, preventing the best appearance of any display.

Is Uncle Sam Sending You These Important Bulletins on Retail-Store Problems?



tailing. The series includes: Installment Buying, Budgetary Control, Retail Store Location, Measuring a Retail Market, Com-munity Advertising, Store Planning, De-partment Leasing, Training Clerks.

Holiday Contest Wins Good Will and Appliance Facts

How the Hilo Electric Company, Hilo, Hawaii, Created Interest in Electrical Devices and Secured Prospect List With Information as to Number of Appliances Already in Homes of Electricity Users

By WILLIAM BLISS STODDARD

as a foreign country, populated principally by barefooted girls in grass skirts, and lei-bedecked youths strumming ukeleles, would get the surprise of his life if he beheld the handsome modern plant of the Hilo Electric Company, Hilo, Hawaii, with its modern display rooms and office, together with two hydro-electric cold storage plant and electrically equipped ice plant. In addition to supplying electricity to the city of Hilo, the company has twenty-four miles of 13,200-volt transmission lines, furnishing electricity to plantations and small villages. A good deal of the household cooking in Hilo is done by electricity. This is due to its cheap rate and to the scarcity of firewood, and also to the cleanliness and coolness of the electric range.

Merchants in Hawaii Cater to Younger Generation

Naturally the firm carries an extensive line of electric appliances, from ornaments for the Christmas tree, to washing machines, and from flash lights to vacuum cleaners. In order to bring all these appliances and household helps into the limelight for the holidays, the Hilo company inaugurated a children's contest that made its name a household word. In Hawaii the children play a greater part in increasing sales of modern conveniences than on the mainland, since Hawaii is populated largely by Orientals, the younger generation of whom wish to adopt American ways, while the elders naturally cling to the customs of their native land. Every merchant, therefore, caters largely to the

In the latter part of November

NYONE who thinks of Hawaii the Hilo Electric Company came out as a foreign country, popu- with a full page ad:

Boys! Girls! Win this wonderful Christmas present—a complete automatic toy electric railroad system, now on display in our show window. Enter our electrical contest. How many electrical home and office aids do you know? Terms of contest:

In order to enter the contest you must be under fifteen years of age, and a resident of the Island of Hawaii.

Make a list of all the machines, home, factory and office equipment that you can think of that is run by electricity on the Island of Hawaii.

After the name of each machine, home help or office appliance that is in your mother's home, or your father's store or office, place a cross. The number of these electric machines that you have in your home does not in any way affect your chance in the contest.

The boy or girl that has the largest list of electrically driven machines or appliances will win this great miniature electric railroad absolutely free.

Be sure to put your name, street address and town on your list and mail to Electrical Contest manager, Hilo Electric Light Company, Ltd.

A Contest with Appliance Survey as a By-Product

An electric railroad system was the prize competed for by hundreds of Hilo, Hawaii, children last Christmas in the contest conducted by the local central station. The one who submitted the largest list of machines or appliances electrically driven, won the prize. Much valuable data were gathered, as the children were asked to check off on their lists, the devices in use in their own homes.

Contest closes December 20. Start your list today.

About ten days later it issued another reminder, this time a full length double column ad, captioned:

Snap into it! Five more days to turn in that list of electric machines and accessories. Win that toy electrical railroad system. Extraordinary offer.

Owing to the interest and the number of children entered in the contest we have decided to add a second prize to the contest. To the second best list of electrical machines and home helps used on the Island of Hawaii we will give a handy electric table stove and grill.

Ask us for particulars and start your list today.

Between these two advertisements the Hilo company ran another two column advertisement in which it called attention to its window display, and gave each boy and girl a running start by listing ten electric appliances, concluding "Now add to this list and mail by December 20 to the contest manager." They were spurred on to activity by saying "Remember, the one that presents the largest list by December 20 takes home the wonderful railroad for a Christmas gift."

Attracted Attention to Window; Brought People Into the Store

The children came in large numbers, often accompanied by their elders to gaze at the little village in the window; at the array of electric appliances arranged in its artistic Christmas setting by the window trimmer; and to enter the salesroom and take note of the many electric appliances scattered about. The window display was a never ending source of wonder to the tropic born children, most of whom had never seen any snow. A painted drop in the background showed a New England landscape, while a series of



Here are some of the holiday advertisements of the Hilo Electric Company, Hilo, Hawaii, which serves a polyglot population.

The heads of all the departments of the Hilo company are Caucasian and about ten per cent of the employees are white. The

balance is divided between Japanese, Chinese, Filipinos and Hawailans, with the latter predominating.

shelves was covered with cotton wadding. All of the appliances — grills, percolators, waffle irons, vibrators, vacuum cleaners, etc., were dusted with glistening diamond dust, and a very realistic snow storm was simulated by dropping from the ceiling threads of different length in which tiny tufts of cotton were knotted. One of the alcoves of the display room was given over to lamps, many styles of which were shown, while on a ledge were the smaller electric table appliances. Palms and ferns were used to decorate the alcove, presenting a very artistic appearance.

Prospect Names Obtained From Lists Children Turned In

Scores of children from the smaller towns and the big plantations sent in lists, and as each list had checked on it the appliances possessed by his parents, the firm secured an excellent list of prospects, and was enabled to send out literature supplied by the manufacturers, exploiting the lines carried by the Hilo Electric Company which were not possessed by the people to whom the circulars and letters were sent.

In getting up the letter, parental pride was touched by mentioning

had been sent in by their son or daughter, and suggesting that many of these would make nice Christmas gifts for the youngsters or some of the grown ups of the family. Incidentally it used the newspapers to advantage at an early date, calling the attention of the men folk to the desirability of electric gifts. One of these showed a young couple admiring the Christmas gifts shown on the table and was captioned:

Christmas Joys! Electrical appliances. Here are gifts that are certain to make her Christmas one of joy. Picture her delight on Christmas morning when she steps into the parlor and finds there on the table an electric iron—percolator-chafing dish—vacuum cleaner—or many other articles from our store that will aid her in the home.

Prizes Consisted of Electric Train and Grill

It was quite a task to check over the hundreds of lists sent in by the children, in order to eliminate duplicates and also many of the odd items listed by the children, such as teeth sharpeners, light houses, and electric driven cannon. The first prize was won by Tomoki Nakazi, 11 years old, in the sixth grade of the Hilo public schools, son of a information in the way of prospects' the fine list of electric machines that Japanese carpenter making koa names and appliances in use.

wood furniture. His photo, holding the train, was run on the front page of the Hilo newspaper, and for the benefit of the reporter he told of his experiences in collecting material: "I work many nights. I go to the library and look in all the books for things run by electricity. I send in 222 names and they cut the list down to 101. But anyhow, I win the prize," and an ecstatic smile lit up his features. The second prize was won by Clem de Silva, the 9 year old son of a Portugese minister. He won the electric grill, but was so disappointed over the gift that James Henderson, manager of the Hilo Electric Company, who has a soft spot in his heart for all children, presented him with another electric train, to the lad's unbounded delight. The boys were evidently more interested in the electric contest than were the girls, as the three largest lists were sent in by boys. The fourth was entered by a girl and she received with delight the grill that had failed to captivate little Clem.

By means of the Christmas contest, the Hilo Electric Company not only stimulated sales and received publicity, but received some valuable

Eight Hints on Store Accounting and Fi

Why the Retailer Should Figure Margin on Selling Price—Survey of Credit and Cash Business in Milwaukee —Possible Pitfalls in Fire Insurance Policies

Why Margin Is Figured on Selling Price

Here are nine reasons why the retailer should figure margin on selling price and not on cost price:

1. Because neither margin nor profit is made until after the sale is made.

2. Because other business figures are based on their relation to sales, and all business figures should be uniformly determined.

selling 3. Because expenses always figured in relation to sales.

4. Because taxes are based on sales. 5. Because sales totals are usually available at a glance.

6. Because profit is earned to reward total invested capital and not only that part invested in merchandise.

7. Because it indicates correctly the margin or profit when the selling price is stated.

8. Because allowances and discount are always made on sales.

9. Because mark-down is always figured on selling price.

Credit and Cash Business in Milwaukee

About 72 per cent of the Milwaukee electrical dealers, according to a survey by the Milwaukee Journal, do business on a combined cash and credit basis. This is to be expected of dealers handling articles such as electric clothes washers and ironers and similar heavy duty appliances. It has frequently been said as a sort of rough guess that "90 per cent of all electrical retailing is done on a time-payment basis." This may be true and it may not be true, but it is worth while to know with some degree of accuracy just how many dealers are selling on a cash, or a credit, or a combined cash and credit, basis.

Seventy-eight per Cent Is Cash Business

The report continues: "Of the business done by the 72 per cent dealers operating on a combined cash and credit basis, 70 per cent of their volume is actual cash business. From this it is readily established that 78 per cent of the total volume

of electrical appliance business in greater Milwaukee is actual cash business, while 22 per cent is credit."

Without Pain

When the salesman fills out his lease on an installment sale of an appliance his customer will sometimes balk at signing and insist that she must talk to her husband first. Hewitt & Warden of Newburgh believe that the complicated "legal" appearance of most leases in use have much to do with this last minute hitch in getting the signature. They are now using the accompanying form which is just as binding as a longer document and which looks as harmless as an order blank.

All legal documents are too long and verbose, anyway, with their never-ending phrases and clauses, and this form saves everybody's time.

HEWITT & WARDEN

68 BROADWAY	NEWBURGH, N. Y.
	Date
I hereby lease from HE Newburgh, N. Y., hereinaft	EWITT & WARDEN, 68 Broadway fer called "Company,"
one	Serial No
to be used at No	Street
written consent of said Con	and not elsewhere except by the
I hereby agree to pay a	as rent for said
as follo	ows: \$per month, on the
day of each mont	th until the amount of \$
has been paid, when the sai shall become my property.	d
	the payments herein mentioned are mpany or its assigns, may take and
option and without any lega	
It is further agreed and	understood that I have no title in
been paid and that I will	until the full amount has take good care of same, and be theft, fire, or other casualty
Signed	managa
Witness	SOURCE COMMO
Received as first payme	ent on the above
\$	
HEW	ITT & WARDEN,
	By

Hewitt & Warden, of Newburgh, N. Y., be-lieve that complicated and legal-looking leases make prospects hesitate to sign up. So they got up an understandable one like this.

Look Out for This Pitfall in Fire Insurance

If the "80 per cent co-insurance Appliance Contracts Extracted clause" is attached to your fire-insurance policies, be careful to keep insured up to within at least 80 per cent of the full value. For example, supposing the value of your stock is \$10,000 and you are properly insured under this clause up to 80 per cent of the stock's value. Eighty per cent of \$10,000,—the stock investment, is \$8,000. Then if a \$6,000 fire loss occurs, the insurance companies will pay you the full amount of damage, \$6,000. Or if the loss is \$8,000 you will be paid that amount.

> Supposing however you had taken out but \$5,000 of insurance on your \$10,000 stock—that is, less than 80 per cent of your stock's value. If you then sustained a \$4,000 loss, you would not be paid \$4,000 by the insurance companies, but only \$2,500!

Owner Regarded as Co-insurer By Insurance Company

Here is the pitfall. Under the provision of this co-insurance clause, where the amount of the insurance is below 80 per cent, the insurance company regards the owners as a coinsurer with it, up to the 80 per cent valuation. In the case of your \$10,-000 stock, if the insurance company is asked to carry only \$5,000, it assumes you to be a co-insurer for the remaining \$3,000, or in the proportion of \$3 to each \$5 of its share of each \$8 of total valuation. Hence out of \$4,000 loss, the insurance company's share would be only \$2,500.

To put it another way: Loss divided by 80 per cent of the value of the stock multiplied by the amount of insurance carried by the companies. gives the sum the insurance companies will pay.

Or to reduce it to figures—\$4,000 divided by \$8,000 equals .50 and this multiplied by \$5,000 gives \$2,500, the amount to be paid.

Look for the co-insurance clause, then, when you sign up.

Finance That Will Build Up Profits

Unique Collection Letter of Fernwood, Pa., Dealer Gets the Money-Profit-Sharing Schemes Mean Increased Cost to the Electrical Dealer—Operating Expenses for Various Businesses

"This Pin" Letter Collects Overdue Bills

John J. Weber, an enterprising printer of Fernwood, Penna., has been getting returns from the foloverdue accounts:

"Dear Sir:

"Here is a pin. (A pin is stuck in the paper at this point.)

"It's not an ordinary pin-not the kind your wife pins her dress with or anything of that kind-it's really a

magic pin.
"We are going to let you use it for a few minutes-and only a few minutes, because it is imperative that we get it back.

"It is going to serve a wonderful purpose. It is going to get a lot of matters cleared up that have beer pending for some time.

"The real reason for this pin, and the real use you are to use it for, is to pin your check to the attached statement and return it to us.

"You can see at a glance that this pin will really do a lot of good for both of us.

"Very sincerely,

"JOHN J. WEBER. "P. S. Don't forget to return the pin at once-others are waiting to

Will Alleged Profit Sharing Schemes Help the Dealer?

Commercialized profit-sharing schemes are showing renewed activity this year. Primarily the plan consists in the giving in trade of coupons or other tokens which are exchangeable for premiums. These premiums are carried in stores operated by the firms from whom the dealer buys his

According to the plan only one dealer in each line of business in a town will be taken into the scheme. Usually it is not installed unless a fairly representative number of local dealers goes into it.

Theoretically this so-called profit sharing plan is supposed to bring the dealer more cash sales and a larger volume of business. It is claimed to be good advertising too and to give

him the upper hand on his unlucky tomers is never turned in for competitor who is outside the premiums. All this goes to the procharmed circle of coupon givers. On moters of the scheme. Their profits the face of it, the idea looks rosy but there is another side to it.

Your competitor is not shut out, lowing collection letter set out to for there are plenty of similar schemes he can take up with. He and other dealers will take on another one if they feel this coupon competition very much. Then will begin the occasional special inducement in the way of double and triple coupons on Saturdays or sales days. Then comes the giving of coupons on credit sales also. All this means increased cost for the dealer. Every supposed advantage is met by the other fellow. In the end no one is any better off than before so far as volume of business is concerned. What each dealer pays out for coupons then becomes a wholly useless and wasteful item of overhead. In many instances dealers have reported that this item amounted to two per cent of sales.

> And, another thing. Fifty to sixty per cent of the coupons which the dealer buys and gives out to his cus-

are said to be enormous.

Study Quotations When Buying

A simple plan which has added \$60 to his profit so far this year has been devised by a Philadelphia contractor dealer. It is as follows:

Under the heading "List of Items" he enters the names of goods in which he is interested. In the spaces to the right of each item he enters the quotations that are made him.

In the spaces marked "Firm Name" are written the names and addresses of firms making the quotations. The figures are revised from time to time in line with price changes.

When in the market for a season's requirements or for supplies for a sizable contract, he orders from those making the most favorable quotations.

Operating Expenses for Various Lines of Business

	sə			ing			68		avers	partm age an	nual	ores w	p#to
Per Cent of Total Sales	Grocery Stores	Hardware	Stores	Men's Clothing Stores	Drug Stores	Furniture Stores	Jewelry Stores	Shoe Stores	\$250,000	\$500,000	\$1,000,000	\$2,500,000	\$2,500,000
Total Expense	16.8	21.6	0	24.03	27.6	30.2	43.5	27.8	26.6	27.6	28.6	28.7	28.5
Gross Margin	19.3	27.	1	25.16	34.0		36.9	25.9	25.8	28.3	29.3	30.2	31.6
Net Profit	2.5	5.	9	1.13	6.3		6.6*	1.9	0.8*	0.7	1.0	1.5	3.1
Stock Turnover	8.3	2. 3.	1 5	2.1 2.0	2.3 4.5	3.0	0.8	1.9	2.2	2.9	3.5	3.3	4.0
Total Salaries and Wages.	8.46	10	2	9.49	10.95	12.1	10.96	10.51	14.5	15.6	15.5	15.8	16.0
Executive and Office Salaries	2.0	4.	0	4.99			6.2	3.5	(Ave	rage	3.2)
Inside Selling Salaries	4.9	6.	2	4.49	12.0		12.8	10.8	(Ave	rage	6.6)
Rental	1.1	1.	7	2.64	2.8	4.6	5.4	3.0	2.2	2.2	2.3	2.9	2.7
Advertising	0.2	1.	12	2.7	0.7	3.0	2.5	2 3	1.8	2.1	2.6	2.9	2.7
Insurance and Taxes	0.35	0.	9	1.05	0.8	1.75	2.1	1.2	1.2	1.2	1.1	0.8	0.8
Supplies	0.37	0.	60	0.46	0.36	0.25	2.3	0.3	0.6	0.5	1.0	0.9	1.2
Light and Heat	0.23	0.	4	0.56	0.8	1.5	1.1	0.6	0.7	0.7	0.7	0.6	0.5
Bad Debts	0.3	0.	5	0.64	0.3	0.5	0.5	0.2	0.3	0.2	0.2	0.2	0.2
Depreciation	0.27	0.	3	1.83	0.6	2.0	0.9	0.4	0.4	0.4	0.5	0.6	0.5
Delivery	2.4	0.	7	0.65	0.1	2.5	0.2	0.2	(Ave	rages	0.9)

Answers to Questions on the Code

Discussion of Wiring and Construction Problems—Nationally Known Authority Answers the Questions of "Electrical Merchandising's" Readers

By VICTOR H. TOUSLEY

Chief of Electrical Inspection, City of Chicago Member of Electrical (Code) Committee, N. F. P. A.

Edison Receptacles Prohibited As Outlets in Baseboard

QUESTION: An inspector has condemned some Edison base plug receptacles placed in the baseboard. I can find no rule in the National Electrical Code which prohibits their use. Is there such a rule?

ANSWER: There is no rule in the National Electrical Code prohibiting the use of Edison plug receptacles mounted Many inspection in the baseboard. jurisdictions, however, have local rules prohibiting the use of the Edison or other open types of receptacles in side walls near the floor and require the use of the separable attachment plug type of receptacle. In these various jurisdictions, the limiting height from the floor varies from thirty in. to four or five feet. The type of receptacle referred to is objectionable as it presents, when not in use, live, exposed contacts which are liable to be the source of electrical fires or accidents. These live, exposed contacts are especially dangerous in apartments or residences as they offer a constant invitation to young children to insert in them either their fingers or metallic objects. Many fires and more or less serious accidents from shocks or burns have occurred where the open-type receptacle is permitted. The separable plug also has the advantage that a strain on the cord will usually pull the plug out while with the Edison plug type with rigid connection, a short circuit may result from a strong pull on the cord. Most table and floor lamps now sold are equipped with the separable type plug.

Service Switch on Porch of Residence

QUESTION: Is it against the code to place a service switch on the back porch of a residence?

ANSWER: Rule 405-a reads: "A switchboard, or an approved cabinet containing a service switch, shall be placed at the nearest accessible point to the entrance of the service, and within the building." The rule cited specifically requires the service switch "within the building." A service switch located on a back porch would not be within the building and would, therefore, be in violation of the rule. A service switch on a back porch is un-

desirable from a safety standpoint. The switch is accessible to children and offers a constant temptation to tampering or to dangerous experiments on the part of children. It also presents undesirable advantages in case of burglary for it is possible to completely cut off the current and leave the premises without the use of light. When burglar alarms are operated from bell ringing transformers these may be rendered useless by the cutting off of the current.

Patent Devices for Supporting Outlet and Switch Boxes

QUESTION: There are a number of devices on the market for supporting outlet and switch boxes. Are these required by the code?

ANSWER: The rules of the code covering the support of outlet boxes are rather vague. While Rule 502-h requires the use of outlet boxes on knob and tube work this rule contains no specifications on the support of such boxes. Rule 503-e says that in conduit work "the entire system shall be securely fastened in position." The rules on wire raceways and armored cable do not specify the manner of supporting the outlet box. Rule 701-i on outlet boxes says that "Switch and outlet boxes shall be so designed that they can be securely fastened in place independent of the support furnished by the conduit." This rule covers only the design of the box and there is no rule in this section which states that the outlet box shall be fastened independently of the conduit. Many territories have local rules requiring the use of standard outlet box supports. The Chicago rule 701-0 reads: 'Switch and outlet boxes shall be fastened independently of the support afforded by the conduit piping. A standard device shall be used for this purpose. Excep-tion will be made in the case of concrete buildings where the concrete will considered as sufficient support. Note: Where a switch or outlet box can be substantially supported by a joist, and is held in place by at least two screws, the box support demanded by this rule will not be required." There is an extensive list of devices designed for this purpose and approved the Underwriters' Laboratories. Whether or not the devices referred to by the questioner are required by the

code will depend upon the particular inspection department's interpretation of the words "securely fastened in position." It is the writer's opinion that this rule should be interpreted to require the use of a device specially approved for this purpose. The old practice of using whatever pieces of timber which may be picked up around a building and then attempting to so nail these to the joist or studding that the outlet box will be "securely fastened in position" is fast becoming obsolete and with the cost of these approved devices so low and the cost of labor so high it is questionable if there is any economy in the old method.

Connecting Two Wires on Single Binding Screw

QUESTION: Does the code prohibit the connection of two wires under the same binding screw?

ANSWER: No rule of the code particularly covers this point. The second note under Article 2 is occasionally invoked to forbid this practice. This note reads: "It is recommended that in all wiring, special attention be paid to the mechanical execution of the work. Careful and neat running, connecting, etc." It is a question as to whether two wires connected under the same binding screw is either "careful" or "neat." At any rate it is not considered good practice and is in some localities forbidden. Wherever possible, only one wire should be placed under a binding screw.

Adjusting Devices on Flexible Drop Cords

QUESTION: Does the Code prohibit the use of ball adjusters on drop lights?

ANSWER: The use of adjusters on flexible cord drop lights is not covered by a code ruling. With devices of this kind it is customary to consult the Underwriters' Laboratories List of approved fittings. Neither the ordinary wood ball adjuster having two holes through which the cord passes, or the sheet fiber adjuster having two slotted holes,—appears on the approved list. There are a number of devices however, which are approved for the purpose mentioned. These are, as a general rule, so designed that there will be a minimum of wear on the cord itself.

Such devices as are listed are approved for use with portable cord only. Not many years ago it was quite common practice in making up drop lights to provide sufficient cord to almost reach the floor. The excess cord was disposed of by using either of the cheap adjusters mentioned above. The purpose of this long cord was to allow for an adjustment of the lamp close to the work at hand. As ordinary flexible cord was used, and as the lamps were frequently adjusted, the cord soon became so worn and frayed as to make it distinctly hazardous. With the it distinctly hazardous. advent of the more efficient incandescent lamp and a general development in illumination standards the necessity for getting the light close to the work has been eliminated and as a result the use of the type of cord adjuster described has been almost entirely dis-continued. As stated, neither of the adjusters mentioned above, is approved.

Correct Method of Rating Service Wires

QUESTION: How should services be rated in amperes under the new Code? Should each twelve outlets be equivalent to fifteen amperes? An apartment house having forty-eight outlets and seven meters or circuits would require No. 8 for service. Would this be correct?

ANSWER: While the question asked here is a very important one and worthy of a very definite answer it is unfortunate that it is not covered by any specific Code ruling. An authentic reply to it can be obtained only from the local inspection department having jurisdiction. There are some points in connection with the question which may, however, be of interest to the questioner. It is not the belief of the writer that the Electrical Committee intended, in the formulation of the branch-circuit rule, that a branch circuit in a residence or apartment should be loaded up to full fifteen amperes connected load, nor that twelve outlets should in every case be the equivalent of fifteen amperes. Rather, that the circuit should have a connected load of, say, around 1,000 watts. The 15amp. fuse would then allow the use of the ordinary electric household devices without the continual blowing of fuses and their probable replacement with larger fuses. A toaster, percolator, grill, or flat iron could be used at the same time the lights were used and the fuse would not blow, or a washing machine with its heavy starting current could be used in the day time and the fifteen ampere fuse would hold it. The Electrical Committee has limited the capacity of the branch circuit to twelve outlets with the intent, it is presumed, of limiting the actual connected load of an apartment or residence to about 1,000 watts. In the city of Chicago, for instance, a recent count of some 364 outlets showed an average of about sixty watts per outlet actually connected. On a basis of twelve outlets per circuit this would load the branch circuit up to about 720 watts. Conditions will of course vary in different parts of the country but the figures

stated will give a general idea of how the outlets run. Another factor entering into the size of mains in apartment buildings is the diversity factor. The diversity factor will of course become more in evidence as the number of apartments connected to the mains is increased. In a recent test made on an apartment building with a total connected load of 59,605 watts the maximum amperes shown on either side of the mains was fifty-four amperes. The readings were taken between 7 and 8 p.m. on February 26. Allowing a 10 per cent increase on the readings obtained the maximum demand would have been only 22 per cent of the total connected load. So far as the particular case cited by the questioner is concerned it would appear that, on the basis on which he figures, or one and a quarter amperes per outlet, his mains would be somewhat larger than would be actually required. It would also seem that an examination of the plans should show approximately the con-nected load. In any event, the inspection department should be asked for a specific ruling.

Use and Fusing of 3-Wire Branch Circuit

QUESTION: Will you please explain the 3-wire branch circuit described in Rule 807. Can it be used for all classes of wiring? Must special permission be obtained to use it? How is it fused?

ANSWER: The 3-wire branch circuit, while it was in common use a number of years ago, gradually went out of use and was finally prohibited by the code.

tween the neutral and the negative. In this case current flows out on the positive conductor, through the two lamps in series, and back on the negative con-No current flows in the neutral ductor. wire and, so far as the operation of the lamps is concerned, this wire could in this case be omitted. However, if the two lamps were not connected to the point on the neutral, current same would flow through this wire from one lamp to the other. In Fig. 2 there is only one lamp connected between the positive wire and the neutral, and ten lamps between the neutral wire and the negative wire. Assuming that each lamp takes one amp., there will be one amp. flowing out over the positive wire, 9 amp. flowing out on the neutral wire and ten amp. flowing back on the negative wire. It will thus be seen that, in a 3-wire circuit, the neutral wire may be either positive or negative or it may be both positive and negative at the same time. It may carry no current at all or it may carry the full current of either of the loads connected to it. Fig. 2 also shows the original method of fusing 3-wire branch circuits there being a fuse in each branch circuit conductor. As it has been common practice to ground the neutral wire, the question naturally arises as to why the neutral wire was fused when this conductor was supposed to never have a potential above that of the ground. It was fused for two reasons; first, because it was formerly the custom to fuse all wires and, second, because the grounding of the neutral was not required in many isolated plants then in operation and even where the neutral was supposed to be grounded the grounding was far from being a certainty. Trans-

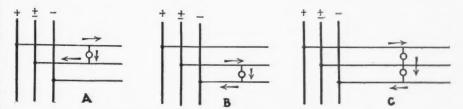
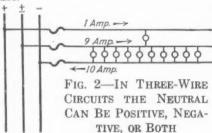


FIG. 1-THE DEVELOPMENT OF THE THREE-WIRE BRANCH CIRCUIT

It has but recently come back into any extended use. As its application to branch circuit wiring is quite new in many territories the system will be described. Something of its evolution is shown by the accompanying dia-Fig. 1 shows the principle of the 3-wire branch circuit. In A, Fig. 1, one lamp is shown connected between the positive and neutral conductors of the branch circuit. Current will flow from the positive main to the positive conductor of the branch circuit, through the lamp and back through the neutral conductor to the neutral main. The neutral has now become a negative wire. In B, Fig. 1, a lamp is connected between the neutral and negative branch conductors. Current now flows over the neutral conductor (the neutral is now positive), through the lamp and back on the negative conductor. In C of Fig. 1 two lamps are connected, one between the positive and the neutral and one beformer secondaries were grounded only at the transformer and these grounds were often cut or otherwise rendered useless. As a result the neutral wire was very frequently at a potential above ground and it was necessary to fuse it to protect it against short circuits which would result should the neutral of the branch circuit accidently become grounded. It was this neutral fuse that threw the 3-wire branch circuit into disrepute. In Fig. 2, for instance, if the neutral fuse blew or was opened by mistake while the load was on a dangerous condition of potentials would occur. If the lamps shown in Fig. 2 each took one amp. they would each have a resistance of 110 ohms. The ten lamps in multiple would have a combined resistance of 11 ohms. There would be a drop of 220 volts across a combined resistance of 110 × 11 ohms or 121 ohms. There would then be a potential of 199 volts across the single lamp and 19 volts

across the group of ten lamps. The single lamp would probably blow up.

The hazards produced and the general trouble from this source threw the 3-wire branch circuit into general disuse. Under present rules, and with a general bringing up of the standards, the effectiveness and permanency of the neutral ground is now assured and it is possible to omit the neutral fuse in the 3-wire branch circuit. This omission removes the undesirable features just described. The 3-wire circuit offers so many advantages that within a few years it will undoubtedly be in very common use.



For a given load only 75 per cent of the wire is used as compared with 2-wire circuits. A decrease in the size of conduits necessary also results. The watts loss on a 3-wire circuit is only one-half of what it is on the 2-wire circuits. The heating of wires grouped in conduit is reduced to one-half. This is shown in Fig. 3 when A shows two 2-wire circuits each loaded to 10 amp. and B shows one 3-wire circuit with 10 amp. on each side. The load is the same in both cases. In the case of A there are four wires as against 3 wires in B. There are 10 amp. flowing on each of the four wires in A but on only two wires in B. The loss in the wires is reduced to one-half and the heating of the wires in a conduit is reduced to one-half. If, on long runs, it is necessary to use wire larger than No. 14 to take care than No. 14 of the drop, all four wires must be increased in A but only two wires in B.

The neutral, as it carries only a small amount of current, can remain a No. 14. The size of panelboards for

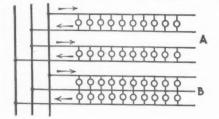


FIG. 3 — DIAGRAM TO ILLUSTRATE
COMPARISON BETWEEN TWO TWOWIRE CIRCUITS AND ONE THREEWIRE CIRCUIT

3-wire circuit can be reduced to onehalf as compared with 2-wire circuits. In other words, a panelboard designed for 10, 2-wire circuits with double-pole fusing can, with no change in size, accommodate 20 circuits on the 3-wire system. While the saving in wires mentioned above is more or less general it does not occur in every case. Where

outlets are widely separated, it is usually necessary to run two wires to each outlet and the saving would only effect that part of the circuit from the point where the circuits become common to the cutout cabinet. There are other economies in the use of 3-wire circuits. The first cost of fuses is reduced to one-half as there is only one fuse to a circuit. So also is the cost of fuse replacement reduced to one-half. This same economy exists in the case of 2-wire circuits with single-pole fusing.

While the 3-wire circuit may be used without special permission, there are certain restrictions in its use which must be taken into account. Threemust be taken into account. wire circuits can only be used from 3-wire mains. Where the load is small and the lighting company supplies 2-wire meters, 3-wire circuits cannot be This applies in many buildings used as apartments or residences. also applies in office buildings where branch circuits are metered. Office building tenants change frequently and a portion of the building which may today be a large office may later on become a small isolated office with a 2-wire meter. In theater wiring, dimmers are often connected in the neutral wire so that in this case it becomes necessary to use 2-wire circuits. In territories where the use of 3-wire circuits is not firmly established it is well to consult the inspection department before attempting to use these circuits.

Plug Fuses on 220-Volt Circuits

QUESTION: Can Edison plug fuses be used on 220-volt circuits? There is a difference of opinion on this question and I would appreciate a ruling.

ANSWER: Although a rule covering this subject has appeared in the Code for several years, it is quite generally misunderstood. Rule 803f of the Code, specifying the style of terminal on fuses, contains this statement: "0-30 amp. B. Approved plugs or cartridge fuses in approved casings for Edison plug cutouts not exceeding 125 voits, but including any circuit of a three wire 125-250 volt system with grounded neutral." This rule gives specific authority for the use of Edison plug fuses on any and all circuits derived from a 3-wire 125-250 volt system with a grounded neutral. The two systems coming under this rule are the ordinary 3-wire direct-current system and the 3-wire single-phase system, both of which have the neutrals grounded.

Edison plug fuses can be used on 220-volt d.c. or single-phase motors up to thirty amp. capacity. They can be used on 220-volt meter connections or can be used in 3-wire switches or cutout blocks with solid neutrals. As a matter of fact there is no place on either of the systems mentioned where the Code prohibits their use. The fact that the plug fuse is approved for 125 volts only is sometimes misleading in the application of this rule, but it must be remembered that in case of a ground on either of the outside wires of a 3-wire system the fuse is subject to only 125 volts or less and in case of

a short circuit there are always two fuses blowing in series so that each fuse is subject to 125 volts. Plug fuses cannot be used on 220 volt, 3-phase systems.

Providing for "Skin Effect" on Cables Carrying Over 400 Amp.

QUESTION: In a recent issue of Electrical Merchandising attention was called to what is known as "skin effect" on large cables carrying alternating current. In this article it was stated that it was common practice to use cables of not larger than 400,000 or 500,000 c.m. As a 500,000 c.m. cable will only carry 400 amp, how do you provide for capacities larger than this?

ANSWER: Where capacities greater than 500,000 c.m. are required on a.c. circuits it is customary to run wires in parallel, using, on each leg of the circuit, as many cables of the size stated as are necessary to give the desired carrying capacity. In a.c. work, the installation of one wire in a conduit is prohibited. It is always necessary, on account of induction troubles, each conduit contain wires connected to each leg of the circuit. Where wires are paralleled on 3-phase work, for instance, the wires should be so grouped that there will be a complete set of phase wires in each conduit. If two wires are paralleled on one phase there should be two conduits with a set of 3-phase wires in each. If three wires are paralleled on each phase there should be three conduits with a set of 3-phase wires in each conduit. At each end of the conduit run, all wires should be brought together in common junction boxes.

Installing Fixtures with Part of System Grounded and Part Insulated

QUESTION: Can fixtures be installed part of system grounded and part insulated on BX job, if not, is it necessary to insulate all when using porcelain receptacles in ceiling bands?

ANSWER: So far as the Code is concerned the grounding of the metallic structure of fixtures is not mandatory. Rule 1403 a states that under certain conditions the insulating joint and canopy insulator "may" be omitted. It is not required that these insulations shall be omitted. Under this rule it would be in compliance with the Code to install fixtures on a BX job with part of the fixtures grounded and part of them insulated; or, in other words, the fact that porcelain receptacles in ceiling bands were used on some of the outlets would not require the insulating of the balance of the fixtures. As a matter of fact, the installation would be safer and more in compliance with the spirit of the Code if the remaining fixtures were grounded. The porcelain receptacles in the ceiling bands should, of course, be poled up in accordance with Rule 1402 b.

Was Old Bob Houdin the First "Home Electrical" Man?

Way Back in 1868 the House of Robert Houdin Was More Thoroughly Equipped with Electrical Devices Than Is the Modern Home Electric

12 to be quite exact about itin 1868 the London magazine called Every Saturday burst out of the bindery with a sensational lead article entitled: "Electrical Novelties." Dealing with the "ex-conjurer," Robert Houdin, the story described the manner in which the owner of the hand that beateth the eye-visually speaking-had equipped his country seat with all manner of electrical devices to do automatically the things which in ordinary homes are left to servants.

When you strolled up to M. Houdin's house to make a call, according to the story, you found on his front door a name plate bearing the name "Robert Houdin." Above this plate was a knocker. Upon using this device in the accepted manner "electricity caused a great bell to sound within." Presently the lock on the door clicked back and the legend on the door plate changed to "Entrez."

Door and Gate Openers

Stepping within, you were awed to see the door close of itself, "as if by magic." If more than one person entered "the invisible and inanimate concierge made the fact known by tinkling a small bell which kept up its tintinnabulum so long as the door was held open."

It appeared that Monsieur had considerable interest in his carriage gates, some distance from the house, for he had a device in his front hall which exhibited the words "The Gates are Open" or "The Gates Are Shut" as the case might be.

Rural free delivery brought the owner his mail and by "harnessing the galvanic currents" a communication system was installed between the mail box and the "great house" whereby the former prestidigitator was informed how many items of mail were placed in the box. By special arrangement with the postman a code of signals was arranged so that he could indicate letters,

NE Saturday afternoon in packages and newspapers. While the September-it was September story does not go into details, it is conceivable that three pushbuttons graced the side of the mail box, one each for letters, parcel post packages and newspapers. Perhaps the first button actuated a cow-bell; the second a buzzer and the last may have roused a giant klaxon to life. There was a counter signal, too, in case the postman was wanted at the house.

Electricity was further utilized to guard the Houdin horses against the shortcomings of the human memory. "The horses," says the story, "in a stable more than 40 yards from the house, were fed at regular intervals by electric intervention."

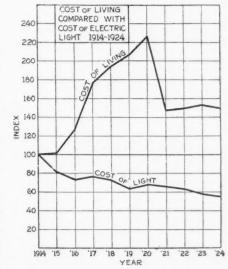
At stated intervals a clock sent an electric current over a wire leading to the "provender hoppers" and allowed food to fall into the mangers. This same clock was used to transmit time to two large external dials and to several smaller ones about the house so that all of the time indicators "went together in sympathy,"

not to say synchronism. That "electric time" idea hit the author hard for he broke loose from his sombre Saturday review style to say: "Father Time has here a company of subalterns that march step by step with irrefragable order."

Besides feeding the livestock and telling the time within and without the mansion, this master clock was also made responsible for announcing meals, calling servants in the morning by sounding "alarums" and at night it connected up the electric burglar alarm which included all doors and windows. One can imagine M. Houdin closing his nightly prayers with the exhortation: "And O, Lord, send me one nice frail burglar so that we may test the efficacy of our galvanic alarums, Amen."

Houdin, it seems, played a low galvanic trick on his head greenhouser. He installed, secretly, a thermostat in a strategic point in the nursery of his pet palms and cherished carnations, and ran a pair of wires to his own study. There he connected up an indicating device that told him whether the temperature in his palm room was too hot or too cold. The gardener always got a call the instant the thermometer varied from the agreed range, but never did he know how his uncanny master was able to spot his deviations with such instant accuracy.

The Decreasing Cost of Electric Light



Reduction in the cost of light gives the dealer and salesman of lamps and fixtures a strong selling point. Reduction in rates for current, improvement in efficiency and reduction in prices of lamps have made for the startling decrease, as compared with an increase in the cost of living, according to a report presented at the N.E.L.A. Convention.

Sell Houdin's 1868 Ideas to 1924 Customers

Aren't there some good hunches for modern home electricians in this early palace of galvanic alarums and name plate annunciators?

Suppose for example, that you set down on the margin of this page the names of five people in your territory who own houses valued at more than fifteen thousand dollars. Has any one of the five homes an electric time system? Has it a thermostat in the conservatory that will not only warn of low temperature, but will adjust the furnace to compensate for northeast winds? Perhaps it doesn't need electric door closers, but how about remote control for windows, so that a touch of a button at the head of the bed serves to shut the windows in the morning? Has it burglar alarms? Pride of possession was what spurred M. Houdin to put in electric servants in his home back in 1868 and that same pride of possession will enable you to sell infinitely better equipment to every high class residence in your community today!

Electrical Merchandising

believes that:

THE opportunity to sell electrical appliances at Christmas time should be developed to the utmost by electrical dealers, contractor-dealers and central stations,—

 Because it will pay a handsome profit on abnormally large sales;

2. Because it brings a chance to sell things to customers that they would not buy at any other time;

3. Because it leads to the penetration of many new homes that have never been sold before, interesting them in a program looking to the gradual purchase of a complete electrical equipment.

Christmas Selling Is Worth the Attention of the Boss

IF THERE is any thing above all else that makes money for the electrical merchant at Christmas time it is attention—attention to customers, to display, to advertising, to stock. Maybe this order should be reversed, but no matter—the point is that the man who plans his Christmas selling and watches every detail during the hurried weeks of the "holiday rush" is the man who cashes in.

All the wise old-timers are getting ready for Christmas throughout the year. An idea here, an idea there, perhaps a novelty that looks attractive for a window or a folder—month after month the Christmas program and the Christmas stocks build up. Then when the selling starts—the progress made in every line is watched, the interest that every advertisement and every window draws is studied and the merchant himself is in the store directing every move in the campaign.

The man who lets the shopper catch him unprepared is literally throwing away this great annual opportunity. It will pay to lay other things aside from now till Christmas and make a real success of it.

Electricity's Effect on Higher Wage Scales

OCCASIONALLY one hears, as an objection against the electrification of industry, that motors put men and women out of jobs and by creating an over supply of labor, cut individual wages.

Yet the facts are just the reverse. Greater electrification of industry actually means a higher wage scale, as a comparison of American and British conditions will show. In England, with 1½ hp. in motors per industrial employee, the wages of the average workman are \$500 a year. In the United States with 3½ hp. per workman, an average wage of \$1,200 prevails. Wages, it would appear, keep step with the ratio of motors installed.

Electricity—in industry, as in the home—reduces laborious human effort, and increases individual productivity and earnings.

Make Your Business Home Electrical, Too

HE man who rides around in a Ford while attempting to sell his customers high-powered motor cars, and the electrical dealer who attempts to sell electrical equipment while he himself uses none of it, have often been held up for criticism. A story told by a salesman specializing in electric lighting equipment in a Western city brings out the importance of the same principle as applied to the business home of the electrical man. A sale of modern fixtures with adequate lighting for an office building had finally been consummated after considerable persuasion and education of the customer. Thinking to see the latest practice in lighting to be used as an example in his own case, the man at the last minute paid a visit to the offices of his local power company. Unfortunately the lighting of this building was of a makeshift type and on a much lower scale than that advised by the salesman. The man decided that if the people selling the electricity found it best not to use too much of it for lighting purposes, he would follow their example,—and he cancelled the order.

No parent who brings up children on the precept, "Don't do as I do, do as I say" has ever been a success.

Electricity Means Service to Mankind

OUR AGE, and particularly America in it, are accused of having fallen slaves to the "commercial ideal." And the root germ of that evil, it has been said, is the worship of success in terms of money. But if a man produce what is of service to mankind, or what is beautiful—and if he knows he is doing it—he can truly claim to be following in the paths of the greatest servants of humanity.

In a thousand ways, electricity means service to mankind. In other ways it means beauty. So we who follow in its path—if we keep our eyes up and not too closely on the work at hand—can well feel a justifiable thrill, a high pride, in our calling.



The "Safe and Sane" Christmas

OWING to the fact that electric lights on Christmas trees replaced the old-fashioned candles, the Christmas of 1923 was celebrated in San Diego, Calif., without a single Christmas-tree fire. This fact was given considerable publicity by the fire department of that city and was taken up editorially by the local papers, with the result that the "Safe and Sane Christmas" has become as much of an institution locally as the "Safe and Sane Fourth." The idea is one which might be adopted elsewhere.

Ideas for the Man Who Sells

"Electrical Merchandising" has helped us more than any other source in making our business a success. We look forward to its arrival as we do to magazines taken purely for pleasure.

> K. B. Stahl, Berlin, N. H.

"Electrical Merchandising" is undoubtedly the finest publication that a dealer can read. I am sure the trade is being benefited by your work.

P. L. Watson. Gridley, Calif.

Paying the Customer Instead of the Salesman

An ingenious method of securing attention for the sales letter was recently devised by the Frank L. Pollard Company of Oakland, Cal., in a direct-by-mail campaign featuring vacuum cleaners. It consisted of sending every prospect a check for five dollars, or what appeared to be so at first sight. The housewife who received such a check in her morning's mail, naturally was interested at once and without question read the letter which accompanied it. This letter was addressed personally to her and read:

Dear Mrs.

ty

Enclosed you will find a check for \$5. You will wonder what the reason is for enclosing the check. Well, the story is short. You perhaps know that practically every vacuum cleaner sold has been sold by a solicitor going from door I have realized that many women do not welcome the door to assure you that if this offer appeals to

FRANK L POLLARD COMPANY 1184 320 THIRTEENTH STREET Wakland, Calif., 192 MRS. J. W. OTTERSON 5.00 Van to the order of DESUMOFSSANDOOCTS. Bollars EUREKA VACUUM CLEANER

The housewife who receives a check for five dollars in her morning mail, will read

the letter which accompanies it in order to learn why she is so favored.

door peddler type of salesman so the question arose, "How are we going to sell vacuums?" Being a woman and appreciating a woman's viewpoint, I suggested this plan: Give the customer \$5 toward the purchase price of a vacuum cleaner, instead of paying it to the salesman. The company for which I work is willing to have me try my plan as it is opposed to house-to-house solicitation. Therefore, I can

you, you will not be bothered by any

In order that you may be entirely satisfied, I should like to send the vacuum cleaner out on a free trial. This will give you the opportunity to prove to yourself what a truly wonderful servant a real vacuum cleaner can be.

All you have to do is to telephone Oakland 1273 and ask for "Miss Sullivan" and I will personally see that you are promptly cared for. Remember, you are in no way obligated to accept the cleaner if it does not meet with your entire approval.

If you do not care to pay the entire amount at one time, the account can be handled on a contract basis with payments as small as \$5 per month. In either event, the enclosed check will be applied as first payment.

As this is a very unusual offer it will only be open for acceptance within sixty days from this date. Therefore, I trust I will hear favorably from you in the very near future.

Yours very truly, F. SULLIVAN. Frank L. Pollard Company.

Upon closer inspection, the check proved to be drawn not upon any bank, but upon the Frank L. Pollard Company. In the lower left hand corner were the words, "This check will be accepted as first payment on the purchase of the Eureka Vacuum Cleaner." The general effect of the check is so realistic however, with its stamped date and check protecting device, that few notice this dis-

Put a Santa Claus Cut-Out Beside Each Gift



Standing beside each appliance in last year's Christmas window of the Thomas Day Company, Oakland, Cal., was a Santa

Claus cut-out, signifying that each article displayed is an appropriate gift. Holly wreaths and festoons completed the display.

crepancy until after reading the letter which makes the explanation.

In spite of the first impression of lavish expenditure on the part of the company, no money actually changes hands unless the customer actually purchases a machine, in which case, the cost of making the sale is very low, as compared with the commission allowed a salesman.

Teaching Women to Service Their Own Appliances

To keep women enthusiastic about the convenience of electricity in the home it is necessary that household appliances be kept in daily use-in perfect working order-and not at some electrician's shop for continual repair. Intelligent use of the washer, cleaner and other appliances together with a general knowledge of the function of electricity in the home, will solve the problem of the dissatisfied customer, thinks the Apex-Rotarex Corporation of New York, and this company took a big step forward in the direction of a greater and better application of electricity to household tasks when it inaugurated a course in electric home economics to teach women the First-Aid to electrical service in the home.

At the Women's Activities Exhibit recently held at the Hotel Commodore, New York City, during the week of the Exhibit two lectures were given daily by Mrs. Eva C. Abbott of the Apex-Rotarex Company on the fundamentals of electrical service, including elementary electricity, nontechnical interpretations of various electrical terms, how to read a meter, how to mend in an emergency, an electric connection, lamp or iron plug, how to replace a fuse and how to intelligently care for and operate electrical equipment in the home. These lectures were given free of charge to visitors at the Exhibit and it is the plan of the company to establish a complete course on electric home economics for the housewife or for women who wish to sell electrical appliances or become, says the company, authorized advisors on home electric engi-

There has been more or less discussion on the need for educating the woman to the use of electricity but this course is the first step toward a working plan. There is, certainly, an unusual opportunity for the central station's educational department,



In the midst of the weekly ironing it is indeed a serious matter to the housewife to have something go wrong with the electric iron. How a cord or plug may be immediately mended, without waiting for an electrician, is being explained by Mrs. Eva C. Abbott of the Apex-Rotarex Company of New York to Miss Dorothea Herrick, a visitor at the Women's Activities Exhibit recently held in New York City.

the local electric league and the dealer himself through the home economics departments of the local schools to promote an even greater use of appliances, by first, making the woman realize her need for laborsaving equipment and, second, to instruct her in its care and intelligent operation so that she remains an enthusiastic and satisfied user of electrical service.

Try This at Your Electric Show Exhibit

For several years as a part of their exhibit of appliances at the county fair, the Ross Electric Company of Superior, Wisc., has given away a vacuum cleaner for cards filled in with name and address. The results were as usual. Thousands of names were received which the salesmen found of little or no help in selling cleaners. Too high a percentage were not good-enough prospects to justify the salesmen following them all up.

This year however a new plan was tried which sold a cleaner instead of giving it away and also netted sixty real honest-to-goodness prospects for sales. This profitable idea was an auction. The sign "A Vacuum Cleaner at Your Own Price," attracted interest. Bids were accepted for any amount and of course the chance was not lost to do some

real hard selling to the prospect. The bids were written and signed and after the fair the lucky bidder's name and bid was published and the cleaner was delivered. The Ross Electric Company had sold a \$65 cleaner for \$64 which was the high bid. There were sixty bids in all—from \$20 up.

An Electrical Brownie Tells the Electrical Story

Children are the most loyal of all "fans." Let them once become used to the fact that there is a story to be found on a given page of the daily paper and they will let no day go by without demanding to have it read to them. The Pacific Gas and Electric Company has taken advantage of this psychological fact to run a series of Electrical Brownie stories for children in their eight page newspaper which is sent out monthly to all consumers and stockholders. The little stories are illustrated to attract the youngster's eye and carry not only a bit of entertainment but also a brief message of the service of electricity in the home, which cannot be missed either by the children themselves-or by the parents who do the reading aloud.

Another good will idea which has been carried out by this company is the running of a "Helps for Homemakers" page which is full of practical suggestions for the housewife on the use and care of her electrical equipment. A ten dollar prize is given each month for the best idea sent in by a reader of the paper. The interest evinced by housewives in information of this sort is evidenced by the number of replies received, which was over seventy-five in the first two weeks after the page had been started-and an even larger number thereafter.

One Cent's Worth of Coal Will Do a Man's Work All Day

In a recent address, Dr. George Otis Smith, Director of the U. S. Geological Survey, said: "Steam coal costs about a cent a pound; under ordinary practice a cent's worth of coal will yield one horsepower of electricity, or the energy of a manday. Plainly it pays to substitute electric-power for man-power, and herein lies America's opportunity to win a place of pre-eminence among the nations of the world."

Lighting Equipment Sales Methods

"Electrical Merchandising" is the greatest journal in the world for a contractor-dealer.

> L. L. Parkhill, New Brighton, Pa.

"Electrical Merchandising" is a veritable "World's Fair" for electrical

> W. B. Page, Arkport, N. Y.

Illumination Schools for California

Recognizing the importance of the illumination field to all branches of the electrical industry on the Pacific Coast, a series of Illumination Schools are to be operated by the lighting bureau of the Pacific Coast Electrical Association this fall. Contractor-dealers, builders, architects, engineers and jobber and central station salesmen are invited to attend these schools which will teach the fundamentals of modern light-

Each class will be limited to 50 members in order that each student may receive the benefits of individual instruction. No one will be accepted who cannot give his full time to the work during the week that the school is being held.

Preliminary plans for the school indicate that there will be no charge for the course, except possibly a nominal registration fee to be determined when the final plans are made. In order to insure attendance of those who enroll, a \$10 deposit will be asked which will be returned when the course has been completed, provided attendance has been regular, but which will be forfeited at the rate of \$2 a day for every day missed.

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The tentative curriculum for the course has been outlined as follows:

Perspective or scope of modern illumination.
Fundamentals and definitions involved in illumination calculation.
Practical problems in simplified illumination definition desired.

tion design

Problems in industrial lighting. Survey of an actual industrial lighting problem.

Preparation of plans on industrial prob-

Study of kinds and types of lamps, and by they are affected by abnormal voltages. Principles of light reflection and dif-sion

Study of different types of lighting equipment.
Study of store, commercial and public interior lighting.
Study of window lighting.
Application of color lighting.
Study of intensities and foot-candle meter.

ciety. Maintenance of lighting systems. A Novel Window Display for

a Fixture Store

Study of lighting problems for offices, drafting and school rooms.

Principles of street lighting.

Explanation of lighting and safety codes.

Study of value of light for commercial purposes.

Talks on Illumination Engineering Society.

Not only is the inside of the new Bailey-Reynolds fixture studio at Kansas City, Mo., arranged for the display of beauty and art, and for the development of that beauty and art, but the show window arrangement is also designed to attract passersby not only in day time but also at night. On the west side of the store, facing on McGee Street, are some unusual windows. The

display is divided into six sections which really comprise small window The background of each nooks. window is the same, a sky-blue soft, velvet curtain hanging full length. Each nook is individually furnished with either a chair and a table, a divan, or a desk; but each has some curiously attractive lamp. times it is a table lamp with softly colored shade, again it is a bronze torchiere, or again it is a handwrought floor lamp in iron.

These window nooks so attractively arranged and so beautifully equipped are one of the best local advertisements the store has. An interesting feature of this display however is the way in which it is handled at night. The soft blue

"Corn Field" Method of Displaying Fixtures



All fixtures in the new store of the Excello Illuminating Company, Baltimore, Md., are arranged on the ceiling similar to corn growing in a field, showing rows from every angle. Each 4-way, pull-switch controls two horizontal rows of fixtures, consisting of four fixtures per row. First pull of

switch lights row A; second discharges A and lights B; third lights A and B; and fourth darkens all lights. Through this arrangement, any fixture can be viewed individually while lit without glare of surrounding display, permitting of better concentration by the customer.

curtains which are lined with raspberry velvet, are then caught back, and all of the many lights in the display rooms are lighted, and shine out brilliantly through the windows. The effect is that of a thousand and one stars shining in a blue sky. As an advertising scheme such a display could hardly be improved upon.

Putting Lighting Fixtures on a Paying Basis

"Lighting fixtures are the style goods of the electrical business; their sale is influenced by the caprices of fashion much as are dress goods." This opinion as expressed by one dealer seems to be general. He had been explaining why ordinary methods of pricing and handling do not apply in building a fixture business.

Much potential profit is lost through failure to correctly size up the demand. So the mark-up on fixtures is generally placed high in the effort to strike a satisfactory average between profits and losses.

One firm reports that it does not make a special charge for depreciation in figuring costs and selling prices on fixtures. Instead it is depending on its mark-up to cover any such loss and still leave a fair margin of profit. This method is extensively used by fixture dealers, yet it is not the best one to follow. It leaves the dealer "up in the air" as to just how well the line is paying. It is not enough to know that in

Fixture Stocks, Sales and Turnover of Eight Dealers

Gross Sales at Selling Price		Average Stock at Selling Price	Margin Per Cent	Overhead Per Cent	Turnover
1.	\$33,800	\$19,495	38	234	1.73
2.	20,000	4,221	50	28.0	5.05
3.	20,121	14,500	75	28.0	1.41
4.	6,420	712	40	22.0	9.00*
5.	3,542	1,230	50	30.0	2.88
6.	2,140	1,783	40	15.0	1.20
7.	1,575	840	50	25.0	1.75
8.	1,100	360	50	25.0	3.05

*Dealer No. 4 sold from catalog largely, increasing turnover and cutting down losses from depreciation.

In this table gross margin are figured on the basis of the selling price. The percent-ages given would indicate a good margin of net profit. However, these dealers, following the well-known custom, are depending upon a higher rate of gross profit and the general

allowance for depreciation in the regular overhead to cover special losses on fixtures. If properly departmentized, the actual net profit on this line would not be as good as it would seem, so the dealer's method is not exactly precise.

per cent net to the good at the end of the year. Possibly some department is not paying as well as it Accurate records would show which one it was and the right thing to do.

Accounting for Costs

All mark-downs, discounts or allowances should be accounted for.

To illustrate: Supposing that a dealer's sale of fixtures for the year at cost price amounted to \$5,000. Say the overhead is 30 per cent on the selling price, which means 43 per cent on the cost price. Then the total cost of these goods would be \$7,150. Let the mark-up on these goods be 100 per cent on the purchase price. This would make the selling price \$10,000. The difference between these figures and the total cost (\$7,150) would be \$2,850 the Let the dispossible net profit. counts and depreciation be 20 perone's entire business there is, say 7 cent of sales as estimated by one

dealer. This would reduce the possible profit \$2,000 leaving only \$850 or 8.5 per cent net. How many dealers are averaging that much on their gross business each year?

The trouble is that most store records used, do not show just where the shortage originates. If they did, the dealer could locate the trouble and apply the necessary Depending on a high remedy. mark-up to cover depreciation, allowances, and so on, is not enough. Accurate record should be kept of all such items. If a discount of \$25 is made on a bill of fixtures a record should be made of it. Where some of these goods are sold at cost or less to get rid of them the difference between the price received and that originally asked should be accounted for on the store books. With such a record one will know just how much depreciation and allowances to account for in figuring his overhead.

Electrical Booth Viewed by More Than 100,000 People



One of the really artistic electrical exhibits at the recent Home Complete Exposition in Indianapolis, Ind., was that of the Sanborn Electric Company. Virtually everything

that can be used in a home in an electrical way was shown. The exhibit was viewed by more than 100,000 persons during the time it was held.

Eliminates Guesswork; Supplies **Current Knowledge of Business**

He can thus do his marking with little or no guesswork. He will know just how much he is making as he goes along. If he finds costs increasing he can take steps to check them either by changes in his buying methods, or by increasing his sales.

Each line should carry its own depreciation so far as practicable, and should pay its own way. means, paying its share of rent, clerk hire, advertising and so on, and a fair net return on the investment. This means departmentizing. This idea is back of all chain, department store and other outstanding mercantile successes. The electrical dealer can use the same idea at least in his booking and it will contribute to his success also.

Hints for the Contractor

The pages in your magazine devoted to the new electrical products are very helpful. I consider "Electrical Merchandising" to be the best magazine of its kind.

L. N. Brunson, F. N. Brunson Electric Company, Gowrie, Ind. The reading matter in "Electrical Merchandising" is interesting, instructive and business-like. The advertisements keep one in touch with the latest and best things of their class.

M. W. Hank, president, Hankscraft Company, Madison, Wisc.

A Disinterested Electrical Man Can Revise the Job Upward!

Not long ago an electrical contractor moved into a New England town where the central station does no house wiring and sells no appliances. The owner of a lot in the business section was making plans to put up an office structure three stories high, and called upon the various wiring contractors of the place to submit bids.

The new arrival in the field went over the plans, located an average of not much over one outlet in each room, and found his bid, amounting to about \$300, was the lowest of those submitted.

Now in this town the central station takes a deep interest in the provision of high-grade and adequate installations, and it so happened that the building owner carried the plans and the bid of Mr. New Arrival over to the office of the central station manager to get the benefit of the latter's advice as to the layout.

The utility company man went over the drawings carefully and recommended not only practically double the number of outlets proposed, but showed how the rooms could be wired so that in case the building owner wanted later to split the rooms into suites for professional or other uses, the wiring would not have to be altered. The owner liked the changes and showed them to the contractor, who rushed over to the central station office with fire in his eye and demanded what the utility company meant by spoiling his contract.

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"Hold your horses," said the central station manager, "and listen here. The building owner has no intention of scrapping your bid, and his original allowance for the cost of wiring was \$900. If you put in

double the number of outlets you planned to and in the places located on the revised drawing, you will make more money, install a better job, and the owner will be better satisfied than if you skimp him and expose him to the future expense of putting in more outlets when he splits up the rooms for doctors and others."

Better Installation Means Better Profit

"I don't know but you're right," assented the contractor, and thus it worked out. The owner was contented to pay the new price and the contractor found that the central station manager only desired to obtain the best installation which the situation warranted. On the revised job the contractor made an attractive profit, and the building has since been increased one story in height and subdivided conveniently without changes of any moment in the initial wiring layout.

Job Signs Advertise the Idea of Electrical Completeness

Few home owners object to job signs placed upon their buildings for the reason that these usually advertise some progressive detail of the construction of which the owner might well be proud, as well, incidentally, as conveying to the passing public just who is carrying on the construction work. Electrical contractors have generally adopted the custom and as a rule new construction jobs in all parts of the country will bear information as to the electrical contractor handling the work, as well as the architect and general contractor. Members of the California State Electrical Contractors' and Dealers' Association have added that body's trade mark with its slogan "Electrical Dependability" to their signs.

Following out this same thought, the California Electrical Co-operative Campaign has issued legible



Signs conveying the information that electric ranges and convenience outlets are being installed are now available to the California contractor for use in connection with

his own job sign. This photograph shows three electrical placards installed on a Sacramento home now under construction. placards informing the public that Home exhibit was advisable. Prizes "This House Is Equipped with Electrical Convenience Outlets." This is reserved for use in connection with jobs where at least one convenience outlet is specified for each room. The sign carries with it no advertising other than the general lesson of electrical convenience. It carries with it to the passer-by the inference that the electrical installation under way is especially complete and thus benefits owner as well as contractor. The sign is particularly coveted by those building homes or apartments for later sale or rent.

A recent addition to the group of electrical placards is a notice now posted by the Great Western Power Company on all jobs where electrical ranges are being installed on their lines. The sign is placed on the new premises as soon as the range has been sold-and ties in excellently with the other placards in conveying the electrical story.

Contest Created Interest in Electric-Home Plans

Model plans for the properly wired home have been issued in connection with most electrical home exhibits and have been widely distributed among the public. many cases it has been found that these have been used later in the construction of actual residences. Not many are sufficiently familiar with the reading of blueprints, however, so that the meaning of the floor plan and symbols is readily understandable to them-and the widest audience is not reached.

In order to familiarize a larger number of the public with the use of such a plan and in particular with the symbols used to designate electrical outlets and other electrical details, a contest was instituted by the Seattle Electrical Club together with one of the Seattle papers in conjunction with the exhibit of an Electrical Home in that city last fall.

The floor plan of a six-room bungalow was published in the newspaper, together with a table of the usual electrical symbols. The contestants were asked to indicate on the floor plan the places where they thought the different types of outlet should be placed and also where they would locate the various electric appliances. It was suggested that in order to carry out this idea most intelligently, a visit to the Electrical

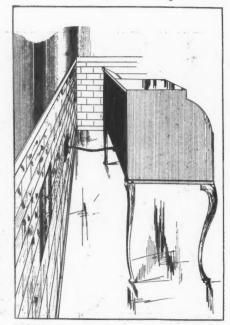
offered were in the nature of electric appliances.

The first prize in connection with this contest was won by Mrs. John C. Gabourel of Seattle, who presented a most complete plan, illustrated with pictures of the electrical devices, cut from magazine advertisements.

Wiring for the Range When the Location Is Unknown

Contractors who wire modern type houses for electric ranges during construction have often observed a difficulty in the location of the outlet for the range, owing to the fact that it is not always known where the range is to be placed. Houses intended for rent usually do not include a range, that being supplied by the tenant, who may pick out another location for the position of his range than the one originally intended. Even where the owner is to occupy the house himself, he may not yet have selected his equipment-and there is no certainty as to the type and the position of the oven. On the other hand it is particularly desirable to make a neat installation and to have as little exposed conduit as possible in a new home. White tiled kitchens further add to the difficulty by making it impossible to make changes in the installation without marring the wall.

In cases of this sort a procedure



A flush type junction box located from six A flush type junction box located from six to ten feet from the switch outlet will make it possible to make a neat job of the installation of the electric range, even if the exact location of this equipment is not known beforehand.

worked out by E. E. Browne of the Browne-Langlais Company, San Francisco, will prove most satisfactory. This layout consists of a flush outlet box located from six to ten feet from the switch and connected by concealed conduit. After the exact position of the range is determined and the type of oven selected, whether right or left hand, the flexible conduit can be connected from either the switch or the junction box to the terminal box of the range, depending upon which will require the least length of conduit. The covers of both switch and junction box have a readily removable knockout, so that the installation has a universal usefulness.

Contractor Uses Newspapers and Bill Boards

The Davis Electric Company, Newark, N. J., is a contractordealer firm that uses billboard advertising with good results. Two 25-ft., and one 20-ft. boards are used, and the complete cost; including painting the boards twice a year, is \$100 a month. These boards carry simple messages which are at the same time forcible, being chiefly directed at getting wiring contracts. For instance a recent design showed a silhouette of a house and the injunction "Electrify Your Home." The Davis Electric Company spends about \$5,000 a year for all forms of advertising, of which bill boards take \$1,200, newspapers \$2,500, and the balance goes into circular-mailing, and miscellaneous advertising methods. A close check is kept on results.

A customer for house wiring or any of the major appliances is asked tactfully whether she was led to the store by advertising and if so in what form. Fifty per cent of all business is thus traced to newspaper advertising and 20 per cent to billboards. It is interesting that of the balance, 20 per cent, is found to be due to personal recommendation of old customers and 10 per cent to all other sources of business including location.

This indicates the importance of the proper satisfaction of customers -the recommendation of old customers stands high on the list of advertising elements and this in spite of the fact that it is less definite and harder to trace than other forms of advertising.

Store Equipment and Methods

To do business without "Electrical Merchandising" would be like doing business without a cash register. Kindly renew our subscription.

Clark-Bracken Electric Shop, Inc., La Crosse, Wis.

Please send the October issue of "Electrical Merchandising" to us as soon as possible as we need it in our business and feel lost without it.

> Knudstrup Electric Company. Manistee, Michigan.

the Customer's Attention

If you were to open an envelope and find a shiny new penny, you would probably read the letter accompanying it out of sheer curiosity. That was what the Monterey Electric Shop of Monterey, Cal., figured, and in consequence they laid in a stock of pennies to be used in connection with a letter sent to a selected list of prospects during the Christmas season. The letter read as follows:

You probably won't feel grateful for this penny because we know you can't do much with it. It won't buy much food; neither will it go very far on your laundry bill. It won't even buy a newspaper these days, but

It will pay for enough electricity to do almost a week's washing.

Maybe it never occurred to you that penny could relieve friend wife of that dreaded, back-breaking job of washing, or that it would really save so much on your household expenses. Yes sir—it will cost you practically

nothing to run a Royal washer long enough to do a week's washing. It's putting it to you in a little different way, isn't it? But it's a happy thought, because you are going to buy her a Christmas gift very soon now-and there is nothing she would appreciate more than a Royal.

It will solve for her that disagreeable laundry problem for all time. It will save her time and it will save her health. It will pay for itself with part of the money it saves because it saves wear on clothes and saves laundry bills, and it fits right on your sanitary

And one of the nicest things about it is how easy we have made it for you to buy one for her. On our special Christmas offer you can buy a Royal for \$150 on terms of only \$10 down and small monthly payments starting

February 1st, 1924.

At your first opportunity step in at our store, 457 Alverado Street, or phone 93, and we will gladly demonstrate this wonderful time and labor saver and deliver one at once or on Christmas morning if you prefer.

Yours for an Electrical Christmas, Monterey Electric Shop, Inc. The letter evidently was read, for it brought 7 to 8 per cent replies. Ten to 12 washing machines were

Sending a Penny to Pay for sold as a direct consequence of this delivery company. This, he found, approach. In addition an unusual prosperous holiday season was enjoyed. Mr. Nash credits to this source of publicity much of the fact that \$500 worth of business was done between the hours of 5 p.m. and 9 p.m. on the night before Christmas.

Delivery Boy Instructed to Unwrap and Connect **Appliances**

An electrical business that is built up around the keystone, service, cannot afford to deny its customers the advantages of a "personal delivery service." This is the conviction of C. C. Bohn, contractor-dealer of 820 Sixth Avenue, New York City, who, during his 30 years in the electrical business, has tried various kinds of delivery service.

From a very modest business, Mr. Bohn pushed the volume of sales up to the point where he felt obliged to furnish a delivery service. He first Mr. Bohn employs a messenger and employed the services of a regular a day-janitor.

cost him from 35 to 50 cents a package. The cost was not excessive, but he regretted the loss of personal contact with his customers.

Now Mr. Bohn knew that his business was built on "intelligent service," so he determined to carry out this principle in his deliveries. Discontinuing the delivery company's service he hired a boy who knew a little about the fundamentals of "servicing appliances" and sent him out to deliver goods. The boy was instructed to unwrap the packages, and, if desired by the customers, to connect the appliances. This system won immediate favor.

The cost of deliveries under the new system is approximately 25 cents a package, less expensive than the old system. The great advantage, however, is in the service itself. The boy is also charged with the responsibility of keeping the store in neat order. Thus, for \$15 a week.



"Intelligent delivery service pays," declares C. C. Bohn, New York, contractor-dealer. The colored boy is receiving instructions from Mr. Bohn's clerk to deliver some appliances. When he arrives at his destina-

tion, the boy will politely offer to unwrap and attach the appliances. The cost of this service averages about 25 cents a package, which is a small price to pay for good-will.

In Talking on the Phone— "Snap Into It!"

BY JAMES MCCUTCHEON

I was sitting talking to a retailer of electrical devices the other day when the phone bell rang-and his end of the conversation was something like this:

"Why, how do you do Mrs .-- ah,-Mrs.-ah-Gordon? What can weah-what can we do for you thisah-morning? Oh yes-sure! I remember now and I-ah-have just found my memorandum of the-ahappointment. And will you-ahwill you please-ah-have your tub full of hot water so we can-ahproceed at once with the-ah-theah-demonstration? Oh surely Mrs. -ah-Mrs.-ah-Gordon, we'll-ah -we'll be there—ah—let's see—at -ah-nine. Good bye!"

Migosh! It was awful. I do not know whether Mrs. Gordon grew irritated or not at this dealer's manifest lack of attention to his conversation with her (and I have curtailed it rather than over-drawn it above) but she had abundant reason to get peevish. The dealer sometimes talked into the phone, but most of the time he didn't.

A little later another call came in -and this time the caller was manifestly a brand new "lead" and this dealer was getting his first chance to tell her his story. She was asking about a washer, and had already

With the Aid of Electricity-

In the steel industry one or two men with unloaders, reptace twelve to twenty men unloading by hand.

In furnace charging, by use of skip hoist, lorry car and automatic weigher, two men replace fourteen

In pig casting seven men with casting machine replace sixty.

In open-hearth operation, one operator charging machine replaces forty hand chargers.

With traveling cranes, twelve men pouring, replace thirty-seven.

Two men unloading pig iron with electric magnet and crane replace one hundred and twenty-eight.

In the clothing industry, six men operating two boarding machines, replace twenty. One girl operating rib-cutting machine produces twenty-five times more than by hand. In men's clothing,

in various processes, machines with a single operator replace six and eight workers.

In the shoe industry one lasting machine produces the equivalent of six to ten hand-workers.

In the glass industry, one bottle-making machine replaces 54 workers.

In window glass, production with a machine blower increases 30 to 50 times. In coal mines an automatic conveyor for pier unloading with 12 men replaces 150 men.

In cigar making, four operators with machines produce the equivalent of 15 by hand.

In wrapping machinery for bread, tobacco, chewing gum, cigarettes, soap, sugar and razor blades one wrapping machine with one operator replaces two, five, eight, and even forty.

posted herself on some other makes -as was evidenced by his end of the conversation.

And again, he wandered instead of "making it snappy." He didn't concentrate on his answers-and and used far too many "ahs." The washer he was selling sold for more than some of the others she mentioned and was equipped with a circuit breaker and 12-in. wringer with soft-rubber rolls. He had "safety" and "freedom from button sewing" for two important (as I see it) arguments for his machine-but he failed to mention either one and spent quite a little time describing the "dinky" construction of another washer!

Wrecking the Prospects of \$5,000 Net

Now this particular man bought a live, growing business only a few months ago-a business that produced \$5,000 for the former owner in 1923, but the writer of these lines is nursing a hunch that the new owner will soon be wondering what's the matter with business!

Whether it is "The Old Man" himself, or one of the "salesmen" who happens to answer the phone or greet the customer who enters the store, "make it snappy"-and making it "snappy" does not, in any degree, necessitate being brusque or curt. Simply give undivided attention to the matter in hand and endeaver to make the prospect feel pleased at the way she is being treated.

And the same story applies to men. I recently heard a dealer talking an electric sweeper to a husband, and during the conversation the husband remarked that his father had recently bought one for his mother, and the dealer asked "What is your father's name, Mr. Babcock?" And the amazed and slightly irritated husband left shortly afterward promising to "think it over." I've wondered several times since then whether Mrs. Babcock has her sweeper yet, and if she hasn't one, did this dealer's absent-mindedness help to dissuade her husband at the critical time?

This "Efficiency Counter" Eliminates Extra Steps



Radio parts, fuses, plugs, and sundry supplies are neatly and conveniently located in this utility counter used by O. J. Goettmann, Pittsburgh. The space above the and appliances. The counter is 6 ft. long, drawers can also be used for wrapping 42 in. high, and 24 in. wide.

"Dealer Helps" the Manufacturers Offer

I want to tell you how much I enjoyed the September issue of "Electrical Merchandising." It seemed to me that each issue is far better than the preceding one.

E. L. Bennett, Pres.,
Advance Appliance Company,
Waterloo, Iowa

"Electrical Mechandising" keeps me well in touch with all the new appliances using electric energy; also, definite methods of merchandising. I have found it a very complete text book on new products.

San Diego Consolidated Gas & Elec. Co., San Diego, Cal.

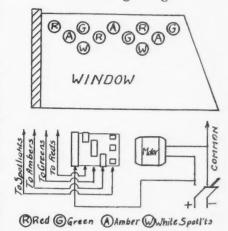
Buying Lamps in Assortments

Instead of the usual straightselection method of selling portable lamps, one or two manufacturers have recently announced plans for selling dealers assortments of lamps perhaps three, six or a dozen lamps in the assortment. Obviously there is a decided advantage in the new plan, for, says H. G. McFaddin & Company, New York City, "in buying assortments the dealer invests far less than he otherwise would. He buys much more economically than individual selection would permit for he is given the advantages of massed production, careful selection based on actual sales to the trade and standard packing. For the inexperienced dealer it is a veritable boon. To such a dealer the prestige of the manufacturer is enough for he realizes that the lamps chosen for the assortment represent a selection made with infinite care with regard to the needs and demands of the general market, prompt re-sale and liberal profit."

F. A. D. Andrea, Inc., has available to its dealers several new sales helps including a 20-page catalog, a fourpage folder on FADA knock-down neutrodyne receiver, an eight-page folder describing the entire FADA line of neutrodyne receivers, as well as enlargements of consumer advertisements suitable for display purposes, other display material, newspaper cuts, etc.

The H. H. Eby Company, Philadelphia, has brought out a new catalog which illustrates the various styles of binding posts made by the company. A display card showing the twenty-five different markings in which "Eby" engraved posts can be furnished, is also available to dealers.

How to Wire a Window for Color Lighting



For a three-color and spotlight arrangement for show window lighting, a suggested wiring layout is shown herewith. This four-circuit plan was prepared by the Reynolds Electric Company, Chicago, and appears in that company's bulletin No. 501 which points out the effectiveness of animation and color in window display. The diagram also shows the hook-up of a flasher.

A Clear Path to Vacuum Cleaner Sales



The holiday season offers many opportunities for displays that can be easily and cheaply arranged. A little time and a few dollars' worth of material will reproduce this window which won first prize in last year's Hoover window contest. Backed by a blue curtain the trees are treated with glue and salt to get the frosty look. The cleaner makes a path to the house through

high-piled cotton batting snow. This year's Hoover week contest has been set for December 6 to 13 inclusive. The conditions governing the competition are that the windows be exclusive Hoover displays and that they be in place for the entire week. Display helps are provided by the company but it is not required that this material be used in windows entered for competition.

Hints on Soldering

A window paster, prepared by the Mitchell-Rand Manufacturing Company, New York City, on its "Spaghetti" tubing and soldering paste contains a few instructions on how to solder. A properly soldered joint, says the company, is permanent and the secret of successful soldering is (1) clean, bright metal; (2) a clean, hot iron, and (3) proper flux. Following are a few points to keep in mind when soldering:

- (1) Solder will not stick to dirty metal. Brighten the surface with a fine file or sandpaper (do not use emery cloth around electrical devices) and at once apply a very thin film of soldering paste to prevent oxidation. Solder may be applied at any convenient time thereafter.
- (2) A cool iron must be kept on the metal so long that adjacent parts are overheated and sometimes ruined. If the solder does not flow instantly and spread evenly, either the metal was not

To Show a Complete Radio Line



There is nothing the prospective customer likes better than an opportunity to handle and examine at his leisure the goods he wishes to buy. Here is a display panel designed by the Carter Radio Company, Chicago, which shows that company's entire radio line attractively mounted in full view and within reach of the customer. The parts are mounted on an etched brass panel set in lacquered brass frame.

carefully cleaned or the iron, if bright, is not hot enough. When a bunsen burner is used for heating, the direct heat should be kept from the tip, and as soon as the flame burns green it should be lowered or the iron used—or a very heavy iron should be turned over so that it will heat evenly.

When an iron is overheated the tinning is burned off, leaving a coating of dross, or oxides, in which condition it will not cause solder to flow. It must be filed bright and retinned.

(3) A good soldering paste will be found almost as quick as acid for soldering all metals except aluminum. Most fluxes in this form develop an acid after the hot iron is applied, and while they may be "non-corrosive" in their original state they are found to cause corrosion when used.

The P. A. Geier Company has made elaborate preparations for Christmas campaigns this year, offering to its dealers a complete sales and advertising program for the holiday season.

"Getting the Right Hook-Up with Celoron" is the name of a new booklet prepared by the Diamond State Fibre Company, Bridgeport, Pa., and Chicago, Ill., on the use of Celoron radio panels, Celoron tubing for winding coils, variocouplers, etc. This company has also prepared for use by its distributors a counter rack large enough to display Celoron panels.

Display Your Batteries Where They Can Be Seen



It is sometimes a difficult problem to place the larger batteries where they will be out of the way and at the same time within view of store visitors. The stand illustrated was designed to provide a convenient method of displaying an assortment of both "A" and "B" batteries. It is distributed by the Universal Battery Company, Chicago, to its dealers, with a small initial order of batteries. The stand is made of steel, red enamel finish, measures 10 in. deep by 28 in. long and is 31 in. high.

A Demonstration for Partly-Interested Prospects



To provide a demonstration for the woman customer who is somewhat timid about actually asking for a demonstration until she is ready to buy, the G. F. Mitchell & Sons Company, Cleveland, has prepared for its dealers a display card that urgently invites passersby to "Watch It Wash." This window card, in connection with a glass-end demonstration machine that is used for the purpose will arrest attention and focus both eyes and interest upon the machine.

Timing the Radio

How the radio may be turned on automatically at the time set for some special program or how it may be turned off in the nursery at some particular time in the evening is explained in the Tork Manual of Time Controls prepared by the Tork Company, New York City. The Manual also lists other services performed by the Tork clock including the timing of illuminated poster boards, street and park lighting, automatic traffic signals, apartment house hall lights, laundry equipment, ranges, automatic electrical farming, flood lighting, church towers and several other applications where a timing device is a real convenience.

"The Novelty Lantern" is published each month by the Novelty Lamp & Shade Company, Cleveland, Ohio. This interesting little publication is sent to the company's dealers and its editors say that it is "lighted" monthly to shed bright rays of sales information about exterior lighting equipment in general and "Novelty" lanterns in particular. If you wish the light focused in your direction, write them at 2481 East Twenty-second Street, Cleveland.

The Standard Electric Stove Company, Toledo, Ohio, announces its new catalog No. 14 which lists and pictures the line of electric stoves made by the company, including several new models.

"Humpty Dumpty Sat on a Wall "



But this King Humpty Dumpty can fall without danger of breaking. He is a "Hemco" double-duty socket and won first brize in the recent "Hemco" window contest. The flowers that bloom in the shrub-

bery are colored lamps. The Public Service Company of Colorado. at Denver, arranged the display which sold plural plugs and lamps at the same time. Humpty Dumpty sold them.

The General Electric Company has issued its Bulletin No. 48,941-A, entitled "CR-9006 Enameled Resistor" The Proof of the Pudding... Units," which describes the uses and advantages of these units and which gives standard ratings and dimensions. Applications are given for several different fields of service.

Altorfer Brothers Company, Peoria, Ill., is announcing the second edition of its little guide book to washing ma-chine sales, "How 437 Dealers Brought Customers to Their Stores." The book was primarily published in the interests of ABC dealers but a copy of it will be sent free to any one requesting it.

SPECIAL SPAGHETTI

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Wall Display for "Spaghetti"

A convenient and novel method of handling varnished cambric tubing or spaghetti has been devised by the Alpha Radio Supply Company, Inc., New York City. A carton, containing 100 lengths of the spaghetti, is arranged to hang on the shelf in full sight of the customer. Easy access to the contents is permitted by means of a slot in the front of the box, from which a few lengths of tubing may be removed at a time without spoiling the effectiveness of the display.

The Kellogg Switchboard & Supply Company, Chicago, has pre-pared a radio handbook contains, among which detailed descriptions and

directions for use of Kellogg radio parts, chapters on "The Functioning of the Apparatus in the Different Circuits," "Explanations of Radio Terms," and "How to Figure Aerials."

The Federal Telephone & Telegraph Company, Buffalo, N. Y., has recently built from 1912 to 1923.



....is in the eating." The surest way of winning satisfaction and further demand for an article is through its successful use, that's why the Chicago Solder Company has prépared this little sample card which carries with it, at the top of the card—as you will see from the illustration—a short length of its "Kester" rosin-core radio solder. Space is reserved on the card for the imprint of the dealer's name and address.

issued a Bulletin No. 160-W on its radio telegraph and telephone apparatus.

The Spaulding Fibre Company, Inc., Tonowanda, N. Y., is issuing a new catalog on its line of hard fibre, soft fibre and Bakelite-Duresto products.

The Hartford Battery Manufacturing Company has issued a complete handbook on Hartford batteries and parts to serve all types of cars and trucks

"Customers vs. Population," has just been issued by the Society for Electrical Development, 522 Fifth Avenue, New York City. Figures are also given for each state, with an estimate for the year 1923. The manual also contains maps showing the wired homes saturation of each state, comparing the fig-ures given in the fourth edition with those appearing in the fifth edition. This study will be of value to manufacturers and jobbers with national distribution to assist in setting up sales bogies; to public utilities for sales bogies; to public utilities for comparative purposes and will indicate to contractors and dealers, communities where there are exceptional opportunities for engaging in contracting and appliance selling.

The F. W. Wakefield Brass Company of Vermilion, Ohio, has issued a folder entitled "This Is All You Need" which briefly outlines the ten essential steps in a store-lighting campaign under the plan developed by T. O. Kennedy, general manager of the Ohio Public Service Company. The folder is published for free distribution by the Wakefield company and will be sent on request to anyone interested.

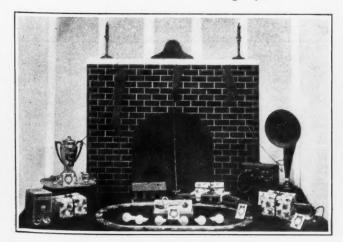
The Campbell Manufacturing Company, Lynn, Mass., is distributing a new folder on its time switches.

"Commutator Insulation and Assembly" is the name of a new booklet prepared by the Mica Insulator Company, New York City. The booklet contains practical and helpful information, specially prepared for motor repair men, motor designers and all others who are interested in the subject with which it

The Delta Electric Company, Marion, Ind., is distributing a number of colorful and entertaining little folders on its bicycle, motorcycle and automobile lights, flashlights and radio equipment.

The G. F. Mitchell & Sons Company, Cleveland, Ohio, has ready for distribution a booklet on its new "Washrite" washing machine.

Two Christmas Displays That Can Be Quickly and Easily Arranged





Dealers who have not already planned their Christmas windows can easily and inexpensively adapt to their own use the displays illustrated, suggested by the window display service of the Edison Lamp Works and the Westinghouse Lamp Works respectively. The window to the left employs for a

background a fireplace made from crepe paper in brick design, tacked flat against the wall with a long strip of white paper for the mantel. The walls are covered with buff-colored crepe paper. The candle-sticks, clock, mother's stocking, dad's sock, sonny's sock and the fireplace opening are

all cut from black mat stock and tacked in place. The other display uses a Christmas-motif crepe paper border, with red or green rope decorations. The Christmas atmosphere is further carried out by the dummy packages, poinsettias, and the card, "Electrical Gifts Are the Most Welcome."



New Merchandise to Sell and Where to Buy It

Radio, Socket Devices and Wiring Supplies Which Manufacturers and Jobbers are Putting on the Market

Electric Sign for **Interior Display**

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
To provide a neat and legible sign of moderate price for installation in large numbers in banks, hotels, department stores, office buildings, etc., the Flexlume Corporation, Buffalo, N. Y., has developed its "Flexray" sign. It has a plate glass face. The bottom is made of bronze and contains two or more standard tubular lamps, reflecting through the edge of the glass. The letters are processed in the back of the glass. Five types of signs in different dimensions for various installations are available.



Neutrodyne Radio Set With **Gold-Plated Trimmings**

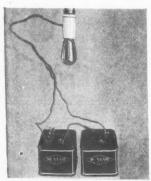
Electrical Merchandising, December, 1924

The Freed-Eissemann Radio Corpora-tion, Manhattan Bridge Plaza, Brooklyn, N. Y., is announcing its new model NR-20 five-tube radio receiver. All metal parts on the panel are gold plated and the dials and engravings are gold filled. Intended retail price, \$175.

Rechargeable Dry Cell Battery

Electrical Merchandising, December, 1924

That it can be recharged in the home, directly from the electric light circuit, is claimed for the new "Re-Vi-Vo" battery brought out by Re-Vi-Vo, Inc., 40 West Twentieth Street, New York City. Either alternating or direct current may be used. Intended retail price of No. 6 "A" battery, 65c; "B" battery, 22½-volt, \$3; 45-volt, \$6.



Heat Regulator Motor and Thermostat

Electrical Merchandising, December, 1924

The Minneapolis Heat Regulator Company, Minneapolis, Minn., is announcing two new models of heat regulators, a Model 77 seven-jewel, eight-day duplex thermostat and an electric motor. The clock is adjusted to isochronism and to heat and cold. The adjustment of the time "set" on the thermostat can be made almost instantly, and the automatic throw of the thermostat pointer is adjustable either backwards or forwards, the company explains.

The motor is connected directly to the house lighting circuit and requires no winding. A small transformer is used to prevent the motor from needlessly using current when not in operation and to supply a secondary 8-voltage circuit.



Double-Light Wall Bracket

Electrical Merchandising, December, 1924

The Florentine Craftsmen, 253 Church Street, New York City, have designed, along with many other attractive wrought iron fixtures, the double-light Italian Renaissance bracket, No. 631, illustrated, which has polychrome finish. Intended retail price, \$23.

Loudspeaker

Electrical Merchandising, December, 1924

The horn of the new "Angelus" loud-speaker brought out by the Reichmann Company, 1725 West Seventy-fourth Street, Chicago, is made of "Thorite"—an acoustical compound—with Florentine finish. The bell measures 12 in in diameter. Intended retail price, \$12.

Valve Grinding Attachment for Electric Drill

Electrical Merchandising, December, 1924

Albertson & Company, Sioux City, Iowa, is manufacturing a valve grinding attachment for the portable electric drill. The tool may be attached to any portable electric drill taking a shank from in. up. It comes equipped with driving points to fit all valves and a lifting spring is also furnished. The attachment changes the rotary motion of the electric drill into an oscillating motion. Intended retail price, \$20.

Fuse Puller

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
For handling cartridge fuses and live wires, the Kurz Electric Service Company, Appleton, Wis., has designed a fuse puller which is insulated up to 10,000 volts. The entire tool, it is pointed out, is solid insulation and is made to handle all sizes of fuses. It can also be used for making splices in live wires. Intended retail price, \$5.

Battery Switch with **Locking Feature**

Electrical Merchandising, December, 1924

By means of a removable nickel shaft with which the new battery switch made by the Walbert Manufacturing Company, Chicago, is equipped, any radio set may be protected against damage to tubes or batteries by persons unaccustomed to its operation. This little shaft when pushed all the way into the switch shuts off battery current. When it is pulled all the way out, the circuit is broken, the set is locked and cannot be turned on until the shaft is inserted halfway in the switch.



Electric Heater with Built-In Ventilator

Electrical Merchandising, December, 1924

Electrical Merchandising,
December, 1924

A ventilating fan with universal motor is incorporated in the construction of the new electrical Hot Air Furnace Company, Cleveland, Ohio. The heater, when in operation, draws cold air from the room into the top of heater in a constant stream. It is then passed over heat elements having a range of 150 deg. to 165 deg., the manuall directions through side vents, thus assuring a constant circulation of air and uniform distribution of heat. The heater illustrated weighs but 18 lb. but larger sized models up to No. 103 for heating homes up to ten rooms, may be obtained.



Canopy Toggle Switch

Electrical Merchandising, December, 1924
A new toggle switch, for use with wall fixtures and electrically-operated devices such as phonographs, player actions for pianos, portable electric fans, dictating machines, etc., has been brought out by Harvey Hubbell, Inc., Bridgeport, Conn.

Bracket with Extra Outlet

Electrical Merchandising, December, 1924
Two uses are provided by one device in the new appropriately-named "Two-4-One" combination bath room bracket and convenience outlet brought out by the Buffalo Chandelier Corporation, 41 East Eagle Street, Buffalo, N. Y. This new fixture permits the use of the heater, curling iron or vibrator without the necessity of removing the lamp to attach the appliance. It is finished in white enamel or plain ivory, as desired. Intended retail price, \$5.



Adjustable Joint for Spot or Flood Light

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
To make convenient the use of a stock reflector, suitable from a lighting point of view, as a spot or flood light, the O. C. White Company, 15 Hermon Street, Worcester, Mass., has designed its style FL Joint which may be clamped directly to the conduit pipe itself. The joint is universally adjustable and is made to support the heaviest type of standard reflector. Intended price of Style FL joint, finished in japan enamel, 80c.



Radio Set

Radio Set

Electrical Merchandising,
December, 1924

The Radio Products Manufacturing Company's new
Model 52 cabinet set employs
six tubes and has the same
balanced plate circuit as its
No. 50 and 51 models. Enclosed
in walnut cabinet. Intended
retail price, \$135. Address of
manufacturer: 501 South Jefferson Street, Chicago.

Double Duty Socket

Electrical Merchandising, December, 1924

That its new double duty socket is smaller than other similar sockets housed in a two-part casing is claimed by the Beaver Machine & Tool Company, Newark, N. J., manufacturer of the socket illustrated. The company also calls attention to the specially patented interior construction of the device and to its neat exterior design. Intended retail price, 50c.



Washing Machine With Wooden Frame

The tub of the model 31-A washer made by the Barlow & Seelig Manufacturing Company, Ripon, Wis., is made of copper, housed in a cypress frame. The copper dasher operates from the copper lid of the tub. Another feature is its spiral gear transmission. Intended retail price, \$105.

Connectors

Electrical Merchandising, December. 1924
Connectors of the "CG" series of the Crouse-Hinds Company, Syracuse, N. Y. are non-slip and made in three styles: male, female and flanged. The first type is for use with Condulets; the second, for use with rigid conduit; and the third, for use with iron boxes.

Decorative Clamp Lamp

Electrical Merchandising, December, 1924
The same mechanical features as are incorporated in the "Clamp-o-Set" lamp of the Bussman Manufacturing Company, 3819 North Twenty-third Street, St. Louis, Mo., are found in the new decorated model recently brought out by the company. The new lamp may be obtained in decorated ivory or decorated bronze. Intended retail price, \$3.

Radio Rheostat

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
The Marshall Electric Company, 3225
Locust Boulevard, St. Louis, Mo., has
developed a new type of rheostat for
filament control. The device is called
the "Marshall-stat" and can be used
with any tube or combination of tubes,
the manufacturer explains. There are
only two terminals and the working
parts are enclosed in a nickel-plated
chamber. Intended retail price, \$1.75

Radio Set with Single Dial Control

Electrical Merchandising, December, 1924
The specifications given for the new five-tube radio outfit made by the Mohawk Electric Corporation, Diversey at Logan Boulevard, Chicago, are: Two stages of radio frequency amplification, detector and two stages of audio amplification; one dial control with high ratio vernier adjustment; wave length range of from 150 to 650 meters; bakelite panel; and period-design cabinet. Intended retail price, without accessories, \$150.



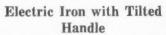


Superdyne Radio Set

Electrical Merchandising, December, 1924

December, 1924

The C. D. Tuska Company, Hartford, Conn., is the manufacturer of a four-tube Superdyne receiver, Model 305 of which is the table model illustrated. The cabinet, which may be obtained in walnut or mahogany, measures 24 in. x 14 in. x 9½ in. and provides room for batteries. Intended retail price, \$150.



Electrical Merchandising, December, 1924 Electrical Merchandising, December, 1924
To relieve ironing strain on the wrist, a tilted handle has been designed for the new "Bee-Vac" iron brought out by the Birtman Electric Company, Lake and Desplaines Streets, Chicago. The toe of the new iron is small and pointed. The cover is brass, nickel plated. A reversible stand, coiled spring wire protector, separable lamp socket attachment and detachable contact plugs are regular equipment of the iron. Intended retail price, \$5.75.



Electrical Merchandising, December, 1924



Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
"Distance Digger" is the name of a new Radak three-tube radio outfit which has been developed by the Clapp-Eastham Company, 73 Tremont Street, Boston, Mass. Intended retail price, in leatherette-covered wooden cabinet, without phones, tubes or batteries, \$34; in polished walnut cabinet, \$38.

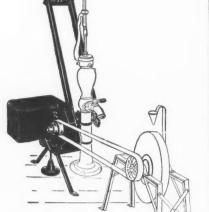


Electrical Merchandising, December, 1924
For use in hotels, restaurants, confectionery factories, bakeries, clubs, the Columbia Metal Products Company, Dayton, Ohio, has brought out an electrically-operated mixer, the "Dayton," which is especially adapted to mixing food and candy and which may be used with either wet or dry ingredients. Operated by G. E. motor.



Electrical Merchandising, December, 1924

A new principle is incorporated in the "Suitzall" heater plug brought out by the Beaver Machine & Tool Company, Newark, N. J., the company announces, for the metal contacts or grips which fit onto the appliance terminal posts have no binding screws to which the heater cord would ordinarily be attached. Instead, the heater cord is snapped under a special tongue arrangement. The casings of the plug are so designed that when they are screwed together the casing securely presses the tip of the tongue down, gripping the heater cord securely. The novel fingers of this new plug are shown in the accompanying illustration. Intended retail price, 25c.



Low-Speed Drive for Farm Pump

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
A slow-speed power take-off is incorporated in the improved electric
drive for farm pumps, announced by the
Cullman Wheel Company, 1344 Altgeld
Street, Chicago. This drive comprises a
shaft which operates at about 340 r.p.m.,
extended from the gear box. A cap
completely encloses the shaft extension
when it is not in operation.

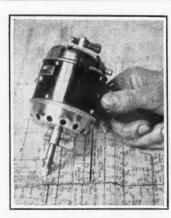
Socket Panel Mounting

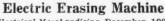
Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
The socket panel mounting made by the Alden Manufacturing Company, Springfield, Mass., is designed to take any "Naald" socket, says the company, making a panel mounted socket of it. The new mounting is a convenience to the dealer, it is pointed out, as it eliminates the carrying of two lines of sockets, one plain and one mounted. The user can turn the socket to suit his wiring on the panel mountings, four positions being possible. Supplied with two length bolts and nuts to accommodate all "Naald" sockets, with or without cushions. Intended retail price of No. 460, 35c.

Five-Tube Receiver

Electrical Merchandising, December, 1924 The Howard Radio Company, 4248 North Western Avenue, Chicago, has added to its line of radio outfits a five-tube neutrodyne model, enclosed in a black walnut cabinet. Intended retail price, \$200.





Electrical Merchandising, December, 1924
For use by architects, draftsmen, statisticians, engineers, or where frequent changes in drawings and estimates must be made, a novel erasing device has been developed by Charles F. Seymour, 22 Myrtle Avenue, Swarthmore, Pa. The eraser is motor-driven and the erasing and power elements are combined in one unit weighing less than 2 lb. It is necessary for the operator to guide the machine only, therefore eliminating the cramped fingers resulting from hand methods of erasing. Intended retail price of the machine, including half gross of erasers, \$20.



Neutrodyne Receiver

Electrical Merchandising, December, 1924

The new Model B balanced neutro-dyne receiver brought out by the Eagle Radio Company, Boyden Place, New-ark, N. J., is a five-tube set, cabinet-enclosed, which is made to sell at \$175.



Electrical Merchandising, December, 1924





Ampere-Hour Meter for **Indicating Condition** of Radio Battery

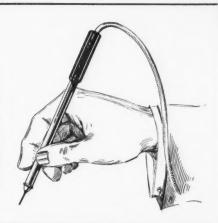
of Radio Battery

Electrical Merchandising, December, 1924

To enable the user to check his radio batteries without resorting to hydrometer readings, the Sangamo Electric Company, Springfield, Ill., has developed a new radio battery meter or radio ampere-hour metre which operates on the same principle as other Sangamo ampere-hour meter which operates on the commercial and industrial storage-battery applications of all kinds. A hand passing over a scale graduated in ampere-hours gives at all times an accurate visual indication of the condition of the battery in ampere-hours of discharge, it is explained. A movable red pointer on the meter is set at the point where the battery should be recharged and when the indicating hand approaches this pointer, it is a warning that the battery should be recharged.

Electric Welding Pencil

Electrical Merchandising, December, 1924 Among the many new tools recently brought out for use in radio work is the "Alco" welding pencil, marketed by the American Wireless Corporation, 54 West Twenty-third Street, New York City. It is made to operate from a 6-volt storage battery or four 1½ dry cells. The tool can also be adapted for use with 110-volt a.c. or d.c. circuits. For a.c. use a transformer is necessary to step down the voltage; for d.c., a resistance in series with the line is required, as no more than 6 volts should be applied. The carbon pencil is 4½ in. long and is replaceable at a cost of about 10c. Intended retail price, \$1.75.



Electric Wringer for Drying Photographic Prints

Thotographic frims

Electrical Merchandising, December, 1924

That it completely eliminates free water from both prints and tins and assures uniform drying in a short time is claimed for the new "Squeegee" photograph wringer designed by the Lovell Manufacturing Company, Erie, Pa, The rubber composition rolls are revolved by a 1 hp., 110-volt, d.c. or a.c. Westinghouse motor which can be operated from the ordinary lighting circuit.

Self-Contained Radio Set

Electrical Merchandising, December, 1924

An improved model of "Operadio" receiver, embodying a new application of the cascade radio frequency circuit, has been announced by the Operadio Corporation, 8 South Dearborn Street, Chicago. The set contains removable radio and audio units, as well as a condenser with planetary disc vernier control, safety fuse for tubes, "A" and "B" battery tester, and space for largest size "B" batteries. Intended retail price, complete, including tubes, batteries, self-contained loudspeaker and all accessories, \$195.



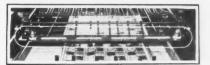
Grinder

The new model grinder brought out by Forbes & Myers, 172 Union Street. Worcester, Mass., was designed to give the proper operating speeds for wheels 2 in. to 4½ in. in diam. and to maintain these speeds under load. The motor is of the induction type, ¾ hp., develope 1 for speeds of 5,400 and 7,200 r.p.m. on 60-cycle current. It is furnished for two or three-phase current of any voltage up to 550 and for d.c. up to 250 volts.



Portable Utility Lamp

Electrical Merchandising, December, 1924 Electrical Merchandising, December, 1924
For use in garages, private garages, filling stations and automotive repair shops of all kinds, the Mann & Briggs Manufacturing Company, 2135 Indiana Avenue, Chicago, has brought out a new portable lamp which, says the company, "puts the light where it's wanted and keeps it there." The light can be raised or lowered and turned from side to side or completely rotated independently of the height adjustment. Intended retail price, model "A," \$15; model "B," \$12.50.

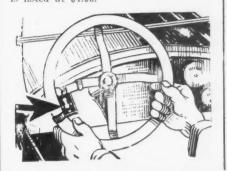


Electric Heater for Use on **Printing Presses**

Electrical Merchandising, December, 1924
Even the local printer is a prospect
for electric appliance sales for there is
a type of electric heater that has been
specially designed for use in the printshop. It is an open glow heater and
is made for attachment to any part of
any press. Its purpose is to eliminate
static electricity, to prevent offset, to
allow the carrying of sufficient ink to
get best results and to eliminate other
troubles of the pressman. The intended
price of the heater, for use on a Miehle
vertical press, is \$40. Other types of
heaters for the various kinds of presses
range in price from \$32.50 to \$185. Electrical Merchandising, December, 1924

Control for Automobile Lights

Electrical Merchandising, December, 1924 Electrical Merchandising, December, 1924
Attached to the steering wheel, the
"Instandin" light control system brought
out by the H. & H. Manufacturing
Company, Bucyrus, Ohio, places the
switch within immediate reach of the
driver. By pressure of thumb or finger
the lights are instantly dimmed without
requiring the driver to stretch or fumble
in the dark for the light control. Style
"A," for headlight control only, is intended for sale at \$2.25; Style "B,"
for both headlight and spotlight control,
is listed at \$4.25.





Cabinet-Type Loudspeaker

Cabinet-Type Loudspeaker

Electrical Merchandising, December, 1924

Resembling a jewel box or miniature treasure chest, the new "Reflectone" loudspeaker marketed by Rice & Hochster, 134 Washington Place, New York City, measures only 6½ in. x 4½ in. The front face of the loudspeaker has an artistic cut-out design to allow the passage of sound and the cover, when lifted, discloses a cedar tray which may be used as a receptacle for cigarettes. Intended retail price of 5-in, high model, \$8; new model illustrated, \$12.

Battery Terminal

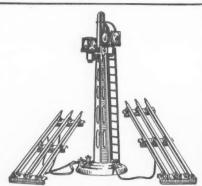
Electrical Merchandising, December, 1924

The Frank W. Morse Company, Boston, Mass., has brought out a new No. 3 model of "Eureka" spring terminal which is the same size as style No. 4 but has a bolt for attaching the wire, making soldering unnecessary. The company is also bringing out a new No. 6 model which is designed to be an unusually handy and powerful spring battery terminal, with a jaw opening of 14 in.



Radio Aerial

That it is weatherproof-enameled, that it is adjustable for any length and that it is equipped with a no-solder buckle are three of the new features claimed for the new "Acorn" copper ribbon aerial brought out by the Acorn Radio Manufacturing Company, 307 West Lake Street, Chicago. Intended retail price, 50 ft., \$1.75; 150 ft., \$4.75.



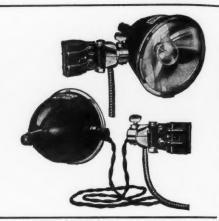
Block Signal for Toy Railroad

Electrical Merchandising, December, 1924 Electrical Merchandising, December, 1924
The wires of the new block signal designed by the American Flyer Manufacturing Company, 2219 South Halsted Street, Chicago, are long enough to permit the location of the wired sections on opposite sides of the track with the signal placed at any convenient point inside the track. While the train is passing one section or block, the red light shows; when the locomotive arrives at the next block, the green light is illuminated and continues to glow until the train has passed. Intended retail price, 60c.

Reel-Type Lamp for **Automobiles**

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
To provide a convenient and muchneeded light for night-time use in changing tires, for roadside repairs or adjustments, for reading the gas gage and
for many other uses around the car,
the Appleton Electric Company, 1701
Wellington Avenue, Chicago, has brought
out a Model K-4 "AutoReelite" lamp,
the reel feature of which is contained
within the shell of the lamp back of the
reflector. By simply loosening the
thumb screw on the bracket, the lamp
may be taken to any part of the car,
the automatle 12 ft. reel paying out and
retrieving the cord as desired. Intended
retail price in black finish with nickel
trim, \$8.50; all-nickel finish, \$10.50.



Boudoir Lamps

Electrical Merchandising, December, 1924

Relectrical Merchandising, December, 1924

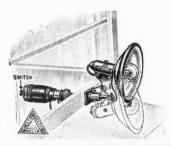
No woman will be able to resist, as part of the decorative scheme of her boudoir, the "Mary Adeline" lamps brought out by Lampkraft, 112 West Forty-fourth Street, New York City, The four different designs of the lamps are shown in the accompanying illustration. The figures are made of bisque and may be had in rose, blue, yellow or orchid. The lamps are fitted with a push socket, white silk cord and separable plug. Intended retail price, including shade, about \$5.



Inside-Control Spotlight for Automobiles

Electrical Merchandising, December, 1924 Electrical Merchandising, December, 1924

The new No. 66 spotlight made by the Delta Electric Company, Marion, Ind., is installed without any cutting of the windshield glass for it is mounted through the metal frame of the windshield. It is made to project light to any desired spot, having a light range of over 120 deg. in any direction, the manufacturer explains. Intended retail price, \$6.



Appliance Connector

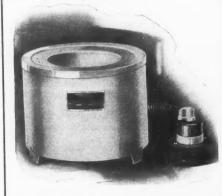
Electrical Merchandising, December, 1924

A new connection for use with such appliances as curling irons, drink mixers, massage instruments, sewing machines, etc., has been brought out by the Frank W. Morse Company, 289 Congress Street, Boston, Mass. The new connection, which is made of hard rubber, has a straight-sided cap and because of its neat appearance, declares the company, it is being adopted by many of the large manufacturers.



Electric Melting Pot

Electrical Merchandising, December, 1924
Harold E. Trent, 1524 Chestnut Street,
Philadelphia, is the manufacturer of a
new three-heat electric pot for melting
tin, lead, zinc, babbit, solder, type
metal, needle metal, etc. It comes complete with ladle and insulated cover,
three-heat switch and 4 ft. of flexible
armored cable. Its capacity is 30 to 35
ib. Intended price, \$30.



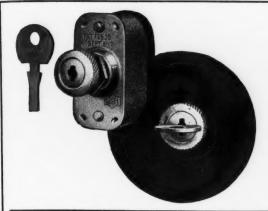


Lamp Guards

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
The Frank W. Morse Company, Boston, Mass., has introduced a new feature in its portable hand guards. This feature consists of a small cushion ring which is placed on the inside of the guard to prevent the lamp bulb from striking the guard if the socket shell becomes at all loose, thus preventing breakage of the lamp. This cushioned ring is now included in all the styles of hand guards and in several of the small guards made by the company.





Battery Switch Which Locks Radio Set

Electrical Merchandising, December, 1924

December, 1924

To protect radio batteries from being run down and tubes burnt out by persons who might accidentally or carelessly snap on the set and forget to turn it off, the Cutler-Hammer Manufacturing Company, Milwaukee, Wis. has brought out a "Radioloc" switch which is installed in the "A" battery circuit. Besides locking the set against use, it also provides a convenient means of interrupting reception without loss of station. Intended retail price, 65c.

Combination Phonograph and Radio Set

Electrical Merchandising, December, 1924

An electric tone arm instead of the standard phonograph tone arm is the outstanding feature of the new "Radiophonola" combination phonograph and radio set designed by the Simmons Phonograph Company, Inc., Seattle, Wash. Through the use of an electric tone arm the same loudspeaker is used for reproducing the phonograph music as is used for radio reproduction, a simple electric switch being provided to connect either the phonograph or radio set to the loudspeaker. The "Radiophonola" is also provided with an electric control to regulate tone volume.



Pendant Fixture

Electrical Merchandising, December, 1924

Unusually attractive in design is the pendant-type fixture illustrated, one of a new line of fixtures recently announced by the Handel Company, Meriden, Conn. The ball pendant has an iridescent gold ground decorated in blue, black and orange, with yellow parrot. The finish of the fixture, No. 7,091, is black and gold.



Electrical Merchandising, December, 1924

Instead of the usual color-dipped lamps and gelatine color screens for border and footlights, the Universal Electric Stage Lighting Company, Inc., 321 West Fiftieth Street, New York City, has developed a detachable color globe which is placed over a clear-glass nitrogen lamp, thereby eliminating lamp coloring and gelatine screens. The globes are interchangeable and are furnished in red, amber, green and blue, making it possible to obtain practically any desired color-lighting effect. The lights are designed for 150-watt nitrogen lamps. Each lamp receptacle has an aluminum reflector and spring-catch color-globe holder. Furnished completely wired with receptacles connected to a cable splicing box



Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924

The new "Groun-Tite" fixture strap brought out by George Richards & Company, Inc., 557 West Monroe Street, Chicago, is especially adapted for use with standard ceiling outlet boxes and standard wall outlet boxes for attaching fixtures. It can be attached to boxes with open covers, no ears, to boxes with open covers with ears, and to boxes with switch covers. A longitudinal slot provides for the raising or lowering of the fixture strap so that the canopy may be centered vertically with respect to the outlet box.



Five-Tube Receiver

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924

Two special features are incorporated in the new "Mary-O-Dyne" receiver announced by the Amber Sales Corporation, 112 Chambers Street, New York City. One feature is the "Fil-A-Meter" which permits keeping under control, through the use of a Weston meter, the amount of filament voltage required. The other feature is the "Modulator" which regulates the tone and volume of the received signal. Two stages of radio frequency, two of audio frequency and one detector are used. Intended retail price, about \$98.

Electric Juice Extractor

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924

Entirely automatic in operation, the new fruit juice extractor brought out by the Arnold Electric Company, Racine, Wis., starts when the container is placed on it and stops when it is lifted off to pour out the juice. It has nickel container, cast aluminum reamer, one for oranges and one for lemons—and has orange-colored porcelain base. The construction of the device is extremely simple so that there is no difficulty in keeping it entirely sanitary for soda fountain use. Intended retail price, \$35.



Neutrodyne Receiver with **Built-In Loudspeaker**

Electrical Merchandising, December, 1924

The Wm. J. Murdock Company, Chelsea, Mass., is announcing a new five-tube receiver with built-in loudspeaker. The mahogany cabinet in which it is enclosed also provides a compartment for "B" batteries. Intended retail price,



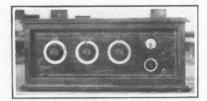
All-Porcelain Connector for Joints

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924

An all-porcelain connector for twisted joints which merely has to be screwed onto the joint, gripping the wires together, has been developed by Weiss & Biheller, Inc., 584 Broadway, New York City. The connector is formed of a single piece of electro-technical porcelain, with molded threads on the inside surface which screw over the joint. This "Simplex" connector has been approved by the Underwiters Laboratories. It is made in various sizes and is designed to sell at 5c.





Five-Tube Radio Set

Electrical Merchandising, December, 1924 Electrical Merchandising, December, 1924
A recent addition to the radio market is the five-tube "Colonial" Model 16 receiver brought out by the Colonial Radio Corporation, Long Island City, N. Y. Two stages of tuned compensated radio-frequency amplification, detector and two stages of audio amplification are provided. Mounted on the panel is an "A" battery voltmeter to insure proper operation of the tubes. Cabinet enclosed. Intended retail price, without accessories, \$200. This company is also announcing a four-tube set, cabinet enclosed and with panel-mounted voltmeter, which is intended for sale at \$85.

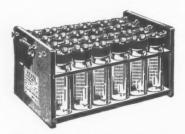


Portable Electric Heater

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924

Because of its deep, quadruple reflector, more heat rays are projected by the new "Magnaray" heater developed by the Magnavox Company, Oakland, Cal., than would be possible by the use of a shallow type reflector, the manufacturer explains. The design of the heater can be seen from the accompanying illustration. It may be obtained in one, two or three-cell sizes, all similar in finish and design except that the one-cell size rests upon a fixed pedestal instead of legs. Intended retail price of Type H-1, one-cell model, 400 watts, 110 or 220 volts, \$17.50; three-cell type, 880 watts, 110 or 220 volts, \$22.50. This company is also making a wall-type model, for permanent installation.



Rechargeable "B" Battery

Rechargeable "B" Battery

Electrical Merchandising, December, 1924

The wiring of the new radio "B" storage battery brought out by the Vesta Battery Corporation, 2100 Indiana Avenue, Chicago, is so arranged that the battery can be charged in multiples of 12, 24, or 48 volts. Any standard charger, vibrating or chemical, charging from alternating current, may be used. A "Vesta" chemical charger is also available for this purpose. The battery is made in 24 and 48 volt units, with a capacity of 5,000 m.a.h. It is provided with four feet, one at each corner, so that one battery may be placed on top of another, thus conserving space. Intended retail price, "RB" 24-volt, \$11.75; 48-volt, \$22.50.

Superheterodyne Transformer Kit

former Kit

Electrical Merchandising, December, 1924

The new transformer kit brought out by the J. T. Boone Radio Corporation, 3469 East Jefferson Avenue, Detroit, Mich., consists of one oscillator coil, a short wave radio frequency transformer, a filter transformer, three long wave intermediate frequency transformers and one audio frequency transformer. This kit, the manufacturer explains, includes all of the transformers necessary to build a complete superheterodyne receiver, including the necessary stage of audio frequency. Intended retail price, \$50.



Vernier Condenser

Electrical Merchandising, December, 1924

A prominent feature of the new "Continental" vernier condenser announced by Gardiner & Hepburn, Inc., 611 Widener Building, Philadelphia, Pa., is the vernier attachment, which is governed by separate control instead of the hollow shaft method. It may be obtained in 13, 18, 25 and 45 plate, ranging from .00025 to .001 capacity. Intended retail price, 13-plate, plain, \$4.50, vernier, \$5.50; 45-plate, \$6 and \$7.



Cam-Vernier Dial

Electrical Merchandising, December, 1924

The new cam-vernier dial brought out by Chas. A. Branston, Inc., 815 Main Street, Buffalo, N. Y., is described by its manufacturer as a conventional 4-in. bakelite dial capable of both coarse and extremely fine adjustment without the necessity of moving the hand from one knob to another, pushing in or pulling out the knob or changing the mesh of gears. The vernier movement covers any ten degrees on the dial at a 10 to 1 ratio, it is explained. The dial is made to fit any condenser with \(\frac{1}{2}\)-in. shaft. Diameter of knob, \(\frac{2}{2}\) in. Intended retail price, \(\frac{\$1.75}{.}\)



Condensers

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924

The Rathbun Manufacturing Company, Inc., Jamestown, N. Y., is making a line of condensers, the outstanding features of which are the single-hole mounting and the method of plate separation in which aluminum plates are die-cast in slotted tubes. Contact is effected by the use of a bronze spring which grips the shaft around two-thirds of its diameter. The condensers may be obtained in vernier, plain or combination vernier types, in capacities from .00002 to .001. Intended retail prices, according to capacity, \$1 to \$6.



Transformer Kit

Transformer Kit

Electrical Merchandising, December, 1924

The No. R-199 "Super" kit brought out by Chas. A. Branston, Inc., Buffalo, N. Y., contains one three-stage long-wave, radio frequency transformer unit, one specially designed long wave single stage tuned r.f. transformer, one special tuned r.f. coupling transformer and one two stage audio frequency transformer unit. Each transformer, the company explains, is adjusted to the same resonant frequency. Intended retail price of the eight transformers, \$35.



Bench Grinder
Electrical Merchandising, December, 1924

For use in tool rooms, machine shops, garages and home work shops, the Azor Motor Manufacturing Company, 7424 Bessemer Avenue, Cleveland, Ohio, has brought out a new bench grinder that is equipped with two ¾ in. x 6 in grinding wheels. It is made to operate from any lamp socket or outlet supplying 110-volt direct or alternating current. Weight: 41 lb. Intended retail price, \$32.





Radio Set to Fit Victrola

Designed to fit and match Victrola models 215, 400, 405 and 410 is the new radio set brought out by the Freed-Eisemann Radio Corporation, Manhattan Bridge Plaza, Brooklyn, N. Y. Its intended retail price is \$95.

Therapeutic Lamp

Electrical Merchandising, December, 1924

For treatment of rheumatism, lumbago, colds, sprains and a host of other common ailments, the therapeutic lamp has been widely recommended. The Bobbett Electric Manufacturing Company, \$13 East Forty-third Street, Chicago, is announcing a new lamp which has aluminum reflector, 7½ in. in diam, with 128-watt, 120-volt carbon stereopticon-type lamp included. Intended retail price, \$6.50.

Washing Machine

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924

The design of the new "Eveready" washer marketed by the National Sales Company, 712 Mulberry Street, Des Moines, Iowa, may be seen from the accompanying illustration. Its principal features are the all-metal aluminum lid, the red-cypress wood tub, the cross-arm dollies which adjust themselves automatically according to the quantity of clothing in the tub and the all-metal wringer.

This washer may be obtained in single or twin-tub models.

Kitchen Lighting Units

Electrical Merchandising, December, 1924

Two new "Red Spot" kitchen units are announced by the F. W. Wakefield Brass Company, Vermilion, Ohio. The No. 1171-PI fixture embodies a practical method of attaching convenience outlet at low cost. A metal channel is screw-bolted to the porcelain-enameled steel canopy, which in turn, is rigidly clamped to a heavy ceiling strap. A three-conductor drop cord terminates in a combination switch and outlet.



Soldering Iron

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
For both home and professional use, the Superior Electric Products Company, 2208 Pine Street, St. Louis, Mo., has announced a new soldering iron, No. 20, which is specially designed to handle work in corners and in small places. Its length is 12½ in. and it has renewable tip. Intended retail price, in polished brass, \$2.50; No. 21, in nickel finish, \$3.



Radio Set

Electrical Merchandising, December, 1924

The Radio Products Manufacturing Company's new Model 52 cabinet set employs six tubes and has the same balanced plate circuit as its No. 50 and 51 models. Enclosed in walnut cabinet. Intended retail price \$135. Address of manufacturer: 501 South Jefferson Street, Chicago.

Curling Iron Heater

Electrical Merchandising, December, 1924

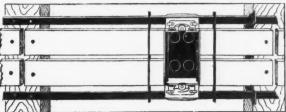
Two curling irons, inserted at either end, may be heated at once in the new "Everhot" curling iron heater developed by the Morton Electric Motor Company, 1124 Oak Street, Kansas City, Mo. The heater is specially designed for use of beauty parlor trade. Intended retail price, 108 to 120 volts, a.c. or d.c., \$9.50.

Switch Box Support

Electrical Merchandising, December, 1924

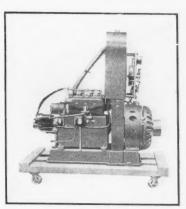
December, 1924

Either spread or gang installation of switch or receptacle boxes may be made with the new switch box support brought out by the Peerless Electro Products Company, 200 Holliday Street, Baltimore, Md. Additional boxes may be added at any time without defacing the wall, the manufacturer explains. The support consists of two strong steel bars each



PEERLESS TYPE B SUPPORT.

18 in. long, equipped with lath holders, a spacer-fastener and adjustable steel clips which fasten to standard wall cases.



Generator for Floor Surfacing Machine

Electrical Merchandising, December, 1924

For use with its floor surfacing machine where electric service is not available, the American Floor Surfacing Machine Company, 518 South St. Clair Street, Toledo, Ohio, has brought out a generating set which is driven by a 4-cylinder gasoline engine. The set furnishes light, when required, as well as power to operate the floor scraping machine. Intended retail price of generator, \$550; floor surfacing machine, \$260.



Curling Iron

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
An ideal Christmas gift for the woman who takes pride in her personal appearance is the electric curling iron, many new models of which have recently been brought out by various manufacturers. One of the new models is the curling iron illustrated, made by the Superlor Electric Products Company, 2206 Pine Street, St. Louis, Mo. It is made in two sizes, No. 301, with fs in. barrel, 11½ in. length, which is listed at \$2.25 and No. 401 which has \$\frac{1}{2}\$ in. length and retails for \$2.50.

Electrically-Lighted Air and Water Tower for Garages

Electrical Merchandising, December, 1924

December, 1924

The Kellogg Manufacturing Company, Rochester, N. Y., has brought out a new air and water tower which is electrically lighted in such a way that the light is reflected through the openings in the letters which read "Free Air." The hose arm may be pulled down in any direction without having to turn the hose or swivel.

Battery Compound

Electrical Merchandising, December, 1924

December, 1924

To prevent corrosion of batteries, the Jake Manufacturing Company, Inc., 183
Center Street, Bridgeport, Conn., has brought out a battery compound which is made "to attack corrosion before corrosion attacks the battery." A coat of the "Jake" compound, applied to the top of the battery, it is pointed out, will prevent moisture gathering and consequently the slight constant discharge which shortens the life of the battery.



Commercial Lighting Unit

Electrical Merchandising, December, 1924

December, 1924

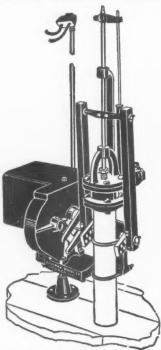
The Beardslee Chandelier Manufacturing Company is the manufacturer of the commercial fixture illustrated which is made of brass finished in oxidized bronze. Its length is 36 in. overall and it may be obtained with 4 in. x 10 in. glass, 4 x 12, 6 x 14 and 6 in. x 16 in. glass, taking from 75-watt to 500-watt lamps respectively. Intended retail price of 4 x 10 size, \$7.85; 6 x 16 size, \$13.70.



Push Button

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
The mechanism of the "S-O-S" push button made by the Anthony Machine & Electric Works, 19 High Street, Boston, Mass., features a self-contained assembly, independent of the outer shell, which is made of heavy brass and provided with four prongs struck up therefrom, for anchoring adjustment. The push button is finished in nickel or brass with either white or dark pearl, black or white rubber center, although special finishes are made to order.



Casing Head for Electric **Pump Jack**

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
The Cullman Wheel Company, 1344
Altgeld Street, Chicago, has developed
a new casing head for use with its
electric pump jack. The casing head
is installed directly on the well casing
in connection with the pump jack and
no pump stand is needed. As the pump
jack is strapped to the well casing, no
foundation is required.

Portable Swinging Cut-Off Saw

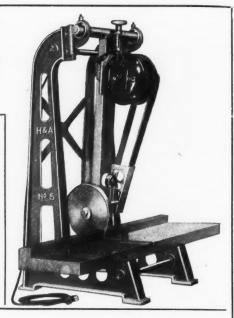
Electrical Merchandising, December, 1924

That it will cut off lumber up to 2 in. thick and 12 in, wide is claimed for the No. 5 portable electric swinging cut-off saw, made by Heston & Anderson, Fairfield, Iowa. It has a \(\frac{1}{2} + \text{10}\) portor and is operated from the ordinary lamp socket. Weight 155 lb. About \(\frac{1}{2}\)120.

Three-Tube Neutrodyne Receiver

Electrical Merchandising, December, 1924

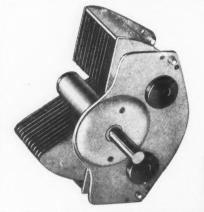
Rounding out the new line of neutrodyne receivers announced by F. A. D. Andrae, Inc., 1581 Jerome Avenue, New York City, is the "Neutro-Junior," a 3-tube receiver. It has a special improved circuit arranged to provide one stage of radio frequency amplification, detector and two stages of audio frequency amplification. It has only two tuning controls in addition to rheostat, with all binding posts mounted through rear on a bakelite terminal block. Cabinet is of mahogany with hinged top. Intended retail price (less tubes and batteries) \$75.



Condenser

Electrical Merchandising, December, 1924

Another addition has been made to the line of radio devices brought out by the Allen Bradley Company, Milwaukee, Wis. The new "Bradleydenser" has a one-plate construction. The rotor is supported on a long bearing sleeve, secured to the stator end plate and thus, says the company, does not depend upon the rotor shaft for alignment, being somewhat similar to the full-floating principle of automobile axles.



Four-Tube Radio Set

Electrical Merchandising, December, 1924

The new "Gold Seal" model of Radak radio receivers brought out by the Clapp-Eastham Company, 73 Tremont Street, Boston, Mass., is a four-tube outfit, comprising one stage of radio frequency amplification, detector and three stages of audio frequency amplification. One stage of audio, the manufacturer explains, is reflexed back to the radio frequency tube. Intended retail price, less tubes and batteries, \$75.



Wire Insulation Stripper

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
Twelve hundred ends an hour, it is
claimed, may be stripped with the new
wire insulation stripper brought out by
the Bard-Parker Company, Inc., 150
Lafayette Street, New York City. The
tool is made to work like a pair of
pliers and to cut and strip the insulation in the time required to close the
hand. Interchangeable blades are obtainable for almost any type of work.
Intended retail price, \$7; extra blades,
any size, 25c. per pr.

Toy Train Outfit

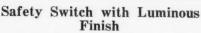
Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924
One twin-motor reversible locomotive,
17½ in long, one illuminated pullman
and baggage car, one illuminated observation car, each 20 in. long, eight
sections of "S" track, eight sections of
"C" track and one "Lockon" connection
are included in the toy train outfit No.
403 offered by the Lionel Corporation,
48 East Twenty-first Street, New York
City, to retail at \$62.50. Lamps for
headlights and cars, connecting ties for
tracks, wires for transformer or battery
connections, together with instruction
book are also included.



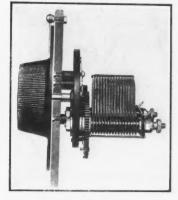


Electrical Merchandising, December, 1924 Electrical Merchandising, December, 1924
Thoroughly artistic in design is the new No. 4 radio cabinet made by the Charlotte Furniture Company, Charlotte, Mich. Its height is 39 in. and the top measures 33½x13½ in. As shown in the illustration, it has shelf at bottom. Finished in brown or red mahogany. Intended retail price, \$25. This company also manufactures cabinets of more elaborate design.



Electrical Merchandising, December, 1924

A lustrous aluminum finish which is made to give a 70 per cent reflection of light is now the regular finish of the "Bulldog" switches, Junior switches and electrical cabinets made by the Mutual Electric & Machine Company, Detroit, Mich. In the flare of a match or candle the "Luminized" safety switches become fully visible, the company explains. No increase in the price of "Bulldog" witches and cabinets is being made.



Radio Condenser

Electrical Merchandising, December, 1924

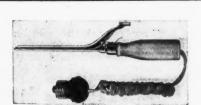
A new variable condenser announced by the Remler' Radio Manufacturing Company, San Francisco, Cal., is designed for use in any set. Twin rotors, with no stator plates are used. The ratio of maximum to minimum, the company explains, is 165 to 1. Intended retail price of Type 630, with .000003-.00035 capacity, including dial stop, indicator, extra charts and drilling template, \$5. No. 631 with .000003-.0005 capacity, is also listed at \$5.



Electrical Merchandising, December, 1924 A "finger-tip" control bar which extends the entire length of the work table, and the open end are features of the "Rainbow" ironer made by the Rainbow Appliance Corporation, 17 Hand Street, Rochester, N. Y. The machine is fully automatic, with enclosed mechanism, and is equipped with thermometer to indicate ironing temperature. It measures 46 in. long x 30 in.

Ironing Machine

Reflector Sockets Electrical Merchandising, December, 1924 Electrical Merchandising, December, 1924
The new "Circle F" reflector sockets brought out by the E. H. Freeman Electric Comany, Trenton, N. J., are designed specially for industrial use under the same conditions as the company's No. 184 and No. 185 weatherproof aluminum-covered sockets, it is pointed out. The new sockets, however, have the bottom threaded to fit standard shades, shadeholders and reflectors, and are interchangeable with the "Circle F" 500 line of bases as caps.



Curling Iron With Removable Sheath

Electrical Merchandising, December, 1924
Although this type of iron has been on the market for some time, the Lincoln Electric Works, 1546 First National Bank Building, Chicago, its manufacturer, calls attention to the new improvement which has been added in the nose, forming a secure fastening over the spring and removable sheath. \$2.



Washing Machine With Wooden Tub

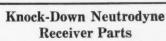
Wooden Tub

Electrical Merchandising, Lecember, 1924
One model of the "Big Three" line of washing machines made by the Barlow & Seelig Manufacturing Company, Ripon, Wis., is No. 41, illustrated. The dasher of this model operates from the lid instead of through the bottom of the tub and fresh air is taken in from the dasher stem at each upward stroke. the manufacturer explains. Another feature is its spiral gear transmission. Intended retail price, \$82.50.



Outdoor Lighting Fixtures

Electrical Merchandising, December, 1924
Illustrated is one of the new models recently added to the line of cylinder lanterns and brackets made by the Herwig Company, 1753 Sedgwick Street, Chicago. These fixtures are designed to meet the decorative and lighting requirements for bungalow, residence and country club. They are finished in dull black or green, with hammered amber glass cylinder.



Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924

An improved model of the "FADA" five tube knock-down neutrodyne receiver has been announced by F. A. D. Andrea, Inc., 1581 Jerome Avenue, New York City. The details of the circuit itself have been changed, including the by-pass condenser, changing the position and size of other condensers in the circuit, etc. A 24-in, panel has been used rather than the former 26-in, panel and a special molded bakelite terminal block is used so that all binding posts and hence all connections, with the exception of the telephone jacks, are on the back of the receiver. Intended retail price of new No. 169-A model, \$72.



Automobile Battery

Electrical Merchandising, December, 1924

The new "Super-Service" battery announced by the Prest-O-Lite Company, Inc., Indianapolis, Ind., is made in types to fit all cars and may be obtained with either wood or rubber case. One of its outstanding features is a new type of wood separator, reinforced with inlaid rubber struts.

News of the Electrical Trade

Jobbers Hear General Tripp Discuss Future of Appliance Selling

"To increase discounts beyond a certain point never seems effective. The increase is, apparently, generally passed down the line, and then the demand for further increases arises once more," declared General Guy E. Tripp, chairman of the board of the Westinghouse company, before the Electrical Supply Jobbers' Association at Cleveland, November 20.

"The all-important thing, from the standpoint of manufacturer, jobber, or contractor-dealer, and public alike, is not discounts, but the increase in the volume of business—'turn-over,' in a word," continued General Tripp. the turn-over increases, the cost of handling each unit decreases, and the tendency is for the income to the trade to increase, and the cost to the con-sumer to decrease. Thus, everyone is benefited.

There is a growing sentiment that the distribution of what are known as current-consuming devices can best be accomplished by that distributor who is able and willing to service the devices after they are sold.

Service After the Sale Essential

"For example, if a woman buys a flatiron at a retail store and encounters some difficulty in attaching it to a lamp socket, she will, unless she receives service that will remove the difficulty, place the iron upon the shelf among her other exhibits of failure, and her house-hold is a closed door to electrical merchandise thereafter.

"Obviously, the electric power companies have a great advantage when it comes to rendering service after the sale, and it therefore behooves all other distributors to place themselves in a position to render the same service if they wish to retain the business.

"Some electric power companies are now giving such service and some are not; but with the establishment of great superpower systems under the management of a few capable and far-seeing men, there will come a time when these men will be less busy with their problems of development and when they will probably come to the consideration of the matters I have just mentioned. Should they decide to adopt a sales-and-service system, it could be inaugurated by a mere order and put into effect over wide areas.

The Best Merchant Will Win

"The result of such a decision will be the formation of two contending mer-chandising groups; first, the great power systems, who will undoubtedly tend to deal directly with the manufacturer on one hand and the consumer on the other; and secondly, the jobbers and

all the remaining retail outlets for electrical merchandise. Which of these two groups will handle the bulk of the business will depend upon which best serves the consuming public-in other words, as in all other economic struggles, the fittest will survive.

"The jobber was the pioneer in the work of distributing electrical mer-chandise, and he should be the first to sense a possible change in the situation and meet it with intelligent preparation. It is to be remembered that he who survives in the merchandising field is a better merchant than he who fails. Consequently the best prepara-tion on the part of the jobbers and their retail customers to meet the competition of the power companies is to make themselves better merchants than the power companies."

Electrical Manufacturers Voice Confidence in 1925

An emphatic note of confidence in the business outlook for the electrical industry was struck by the speakers at the banquet of the Associated Manufacturers of Electrical Supplies at the Hotel Roosevelt, New York, November 12. William H. Tornley presided.
E. M. Herr, president of the Westinghouse Electric & Manufacturing

inghouse



No ordinary case, here, gentlemen. The patient was inoculated with the sport germ on a recent birthday, when his wife and family applied a new golf outfit as a poultice against the cares of heading the appliance sales department of the Worcester (Mass.) Electric Light Company. The result was all that could be desired and the subject of the attack is improving weekly. He has not yet learned how to get out of a "bad lie" and so seldom if ever gets into one. He always tells the truth about his score, which one would expect of O. R. Underhill.

Company, analyzed the present economic situation in the country. "The American and English elections and the adoption of the Dawes plan," he said, "have created a strong confidence in commerce and industry and will stimulate business throughout the world. The electrical industry can look forward to an enduring market. It does not share the belief of some people that the United States will suffer from European rehabilitation, because inevitably with it will come a because inevitably with it will come a greater demand for American goods in foreign markets." Mr. Herr sketched the substantial basis of improved confidence evidenced by increases in employment, wages and per capita earnings and the rising prices of metals.

A message from James H. McGraw, president of the McGraw-Hill Company discussing at length the need for

pany, discussing at length the need for industry statistics on the production, stocks and sales of electrical manufacturers, was presented by Earl E. Whitehorne, associate editor of Electrical Merchandising, Mr. McGraw being absent owing to illness. In this message figures were cited to prove the wide variance between the estimates that are being made by different manufacturing executives in reckoning by guesswork the market for a given commodity. This variance is shown by the estimates that are now being annually compiled by Electrical Merchan-dising and the Electrical World. The industry has suffered in consequence.
Mr. McGraw offered the services of
these papers for the gathering, compilation and publication of statistics on the manufacturing branch of the industry, in the same manner that they now publish mass statistics on the light and power industry.

Harry B. Kirkland to Supervise "Red Seal" Campaign

Harry B. Kirkland, vice-president of the American Wiremold Company, and president of the Electrical League of Hartford (Conn.) has been appointed supervisor of the Red Seal plan, accord-ing to an announcement of the Society for Electrical Development, Inc., which is sponsoring the movement. Mr. Kirkland will co-ordinate the recommenda-tions of the regional advisers and will be available to assist in the develop-ment of other co-operative programs for the promotion of adequate wiring standards.

The Electric Supply & Equipment Company, Inc., Albany, N. Y., with branches in Elmira and Buffalo, Reading, Scranton, Wilkes-Barre, and Erie, Penn., has been appointed distributor for "Eagle" radio products.

The General Railway Signal Company, Rochester, N. Y., has appointed A. C. Holden Pacific Coast manager.

New Radio Trade Directory Now Being Distributed

The November issue of the McGraw-Hill Radio Trade Directory, containing a complete listing of American manufacturers of radio sets and allied products, is now being distributed to dealers.

Copies to the number of nearly 20,000 are going out to the set manufacturers, the wholesalers and retailers of radio apparatus and to the broadcasting stations. If your business comes under any of these classifications and you don't receive your copy after making proper allowance for the book to come through by parcel post, write the publishers, The Radio Trade Directory, Tenth Avenue at Thirty-sixth Street, New York, N. Y. Write on your business letterhead, tell them the line you are engaged in and they'll send you a copy, without charge.

Philadelphia Dealers Guests of Elliot Lewis Company

An extremely successful meeting of electrical dealers was held Nov. 7 in Philadelphia by the Elliot Lewis Company, jobbers of electrical appliances. With four large rooms in the Hotel Sylvania thrown open for display, the dealer saw, in an informal way, the latest developments in labor-saving appliances.

Before an audience of 300 dealers gathered for the banquet in the evening, T. Harry Lewis, vice-president and treasurer of the company, acting as toastmaster, introduced Dr. Charles H. Eaton, in charge of the welfare division of the General Electric Company. Doctor Eaton presented an interesting talk

on personal interest in business.

"Stepping It Up" a playlet staged by the National Lamp Works followed, showing the change in methods of retailing from the old "hand me down" system to the newer and more careful management of today. It showed the value of dealer helps and how the manufacturer today shares the responsibility of making both jobber and retailer successful.

Weagant and Ingersoll Join De Forest Company

The De Forest Radio Company announces that Roy A. Weagant and William H. Ingersoll have been elected vice-presidents of the company; the former as chief engineer in charge of technical activities and the latter to supervise advertising and sales. Mr. Weagant was associated with Guglielmo Marconi for eight years as chief engineer of the Marconi Wireless Telegraph Company. In 1920, he became consulting engineer for the Radio Corporation of America. He is also the inventor of several radio devices used by the United States navy during the war. Mr. Ingersoll was formerly marketing manager for the Ingersoll Watch Company.

The Hoover Company recently promoted F. W. Buck to do special sales

promotion work at the home office, North Canton, Ohio. Mr. Buck has had a varied experience in the electrical field and has been with the Hoover Company since 1918.



The phrase "Let George Do It" has been modified on the Pacific Coast to "Let Sam Taylor Do It." Colonel Sam was one of the forefathers of the electrical industry on the Pacific Coast, having represented the Thompson-Houston Company in the days when electric street lights were first being introduced. At the present time he is secretary of the Pacific Coast Electrical Association and also the representative of the Society for Electrical Development.

The Lincoln Radio Company, Los Angeles, Cal., was classified incorrectly in the last issue as a retailer. The Lincoln company has notified us that it does a jobbing business exclusively.

The St. Louis Rubber Cement Company, St. Louis, Mo., has opened a new factory at 3951-53 Laclede Avenue.

The Colonial Radio Corporation has been organized with offices and factory at East Avenue and Tenth Street, Long Island City, N. Y. Its technical staff includes two eminent radio engineers, Dr. Fulton Cutting and Bowden Washington. The officers are: W. R. Edrington, president; Dr. Fulton Cutting and Bowden Washington, vice-presidents; G. R. Brainerd, vice-president and sales manager; and Frank C. Clark, factory manager.

Charles A. Etem, manufacturers' representative, 3804 Third Avenue, Los Angeles, Cal., has recently moved to that city from Minneapolis and is representing the Leich Electric Company, Genoa, Ill., and the Metsch Refractories Company, East Liverpool, Ohio.

Robert Miller, manager of the General Electric Company's Salt Lake City sales office, has been appointed acting manager of the Rocky Mountain district in the absence of H. D. Randall on account of the latter's ill health.

Electragists Get Second Member on N.F.P.A. Electrical Committee

The Association of Electragists, at the request of the National Fire Protection Association, has appointed an additional member on the Electrical Committee which has charge of all Code revision.

The new member is Allan Coggeshal, first vice-president of Hatzel & Buehler, Inc., New York. He will be associated on this committee with A. Penn Denton, senior member from the Electragists.

Mr. Coggeshal is an electrical engineer and contractor of many years' experience. For some time he has been associated with *The Electragist* as advisory editor on construction practice.

A. Hedeman, manufacturers' agent, Boston, has moved to 80 Federal Street, New Chamber of Commerce Building.

A. S. DeVeau, manufacturers' representative, 53 Park Place, New York, has been appointed to handle the products of the Multi Electric Manufacturing Company.

The Eagle Radio Company, Newark, N. J., has increased its staff with the addition of D. Allen Betts, formerly with the Apco Manufacturing Company. Mr. Betts will remain in the Eastern territory for a short time.

The Independent Radio Manufacturers, Inc., announce that a number of Neutrodyne manufacturers licensed under the Hazeltine patents have adopted the time-payment plan of financing radio sales, through arrangements made with the Commercial Investment Trust, Inc., of New York. The new method simplifies the dealer's problem by relieving him of the burden of carrying the paper and the strenuous work of collections. The Commercial Investment Trust makes collections direct. The dealer is required, under the plan, to secure a minimum down payment equal to one third the total value of the set and its accessories. This obviates the necessity for demanding cash for tubes and batteries. The Neutro-dyne licensees who have already adopted the plan are: F. A. D. Andrea, Inc., Freed Eisemann Radio Corporation; Garod Corporation; Wm. J. Murdock Company and the Workrite Mfg.

John W. Vose, for the past six years purchasing agent of the Foster McDonald Company, Boston, Mass., has been appointed New England representative of the Pittsburgh (Pa.) Lamp, Brass & Glass Company, with headquarters at 12 Pearl Street, Boston. He will cover all these states except Connecticut.

The Colin B. Kennedy Corporation, St. Louis, Mo., has added Theodore H. Nakken to its technical staff. Mr. Nakken has had considerable experience in the fields of electrical research and invention. The regard of a whole nation and the satisfaction of 1,500,000 owners are largely responsible for the demand which enables Hoover dealers to turn their stocks twelve times and more per year.

THE HOOVER COMPANY, NORTH CANTON, OHIO

The oldest and largest maker of electric cleaners
The Hoover is also made in Canada, at Hamilton, Ontario



Murdock Elected President of Chelsea, Mass., Bank

William J. Murdock, president of W. J. Murdock Company, manufacturer of radio phones, was recently chosen president of the Broadway National Bank, Chelsea, Mass. Mr. Murdock started in as a newsboy in Boston, but with industry and ambition, finally started the business twenty-four years ago which is now known throughout the radio industry. He is identified with various business and civic interests in Chelsea, including several other banks and a hospital.

The American Electric Switch Company, Minerva, Ohio, announces that, as a result of its recent reorganization, J. C. Lewis is president, F. F. Cope, sales manager, and K. R. Miller, auditor of the company. The firm is represented in most of the principal cities.

A. F. Parkhurst has been appointed manager of the Chicago office of the Hartzell Sales Company. Mr. Parkhurst's experience in the radio field extends over a period of twenty years.

The Federal Electric Company has appointed J. J. Keith manager of washing machine sales. He will be located at 8700 South State Street, Chicago. Mr. Keith was formerly sales manager for the Lincoln Washing Machine Company and for Altorfer Brothers.

The Standard Electric Stove Company of Toledo, Ohio, announces that Ogden and Denison, its Eastern sales representatives, are now located at 112 West Forty-second Street, New York City.

The Roller-Smith Company, 233 Broadway, New York, N. Y., announces the appointment of Charles R. Speaker, Evening Star Building, Washington, D. C., as its representative in the District of Columbia. Mr. Speaker will also handle the Roller-Smith Company's Government business in the States of Maryland, Virginia, North Carolina and South Carolina.

M. F. Simmons, assistant to the vice-chairman of the manufacturing committee, has been named supervisor of production for the General Electric Company, Schenectady, succeeding W. B. Curtiss, who recently died. This announcement was made recently by Vice-President G. E. Emmons, to whose staff Mr. Simmons will be assigned.

The Eureka Vacuum Cleaner Company, Newark branch, was the winner of the "Millionth Eureka," in a nation-wide sales contest. To win this much-coveted prize the Newark branch had to hang up a mark of 153 per cent of the summer sales quota—representing sales of nearly 2,000 cleaners. The production of the Eureka Vacuum Cleaner Company has climbed to the million mark within a period of fourteen years. The business was organized in 1910. At that time, President Fred Wardell was his own sales manager, advertising manager, financial man and selling force. The company consisted of himself and one stenographer. Today,

over five thousand men and women derive their livelihood in whole or in part from the Eureka business. The company owns one of the finest and best equipped plants in Detroit. Sales branches cover the entire country and sales connections extend into every nation on the globe.

The Automatic Electric Heater Company, Warren, Pa., has obtained the contract to furnish all the electric radiators, etc., for Edsel Ford's two-million-dollar summer home at Seal Harbor, Me. All the rooms of this home will have thermostatic control. A complete heating panel will be located in the basement and current will be brought from transformers located in the building.

The Electric Fireplace Manufacturing Company has moved to new factory quarters at 1908-14 West Lake Street, Chicago, Ill., where it has 17,000 sq.ft. of floor space.

The Adams-Morgan Company, Inc., of Upper Montclair, N. J., has appointed Harry L. Walker, formerly advertising manager of Wireless Age, representative of the "Paragon" line in New York and New England.

The Wisconsin State Association of Electrical Contractors and Dealers, at its quarterly meeting held in Madison, Wisconsin, decided on January 28, 29 and 30 for its coming convention at Milwaukee.

F. A. D. Andrea, Inc., 1581 Jerome Avenue, New York City, announces the opening of a "Fada" office at 326 West Madison Street, Chicago, Ill., in direct charge of L. J. Chatten, who for the past year and a half has been a district sales executive of the Fada organization.

The Birtman Electric Company of Chicago, Ill., recently held a sales contest for jobber salesmen in which H. C. Hershey, of the Jones-Beach Company, Philadelphia, won first prize for selling the greatest number of "Bee-Vac" cleaners. Second prize was won by L. A. Spencer, of the C. S. Mersick Company, New Haven, Conn.

The Edwin F. Guth Company, St. Louis, Mo., is now represented in New York City by Sampson Levy, who will have charge of sales in the New York territory.

The Westwyre Company, Westfield, Mass., manufacturer of radio parts, has appointed Henry E. Sanson sales manager.

The Alloy Metal Wire Company, manufacturers of resistance wires, monel metal and other nickel alloys, with offices in the Grand Central Terminal Building, New York City, and mills located at Yonkers, New York, recently purchased the plant of the Du Pont Motors Company at Moore, Penn., a suburb of Philadelphia. This property is located on the main line of the Pennsylvania Railroad, New York and Washington Division, and contains approximately seven acres of ground, on which is erected a modern plant of steel and brick construction, covering 75x300 ft., the main part being three stories high. In addition to this, there are also a power house and warehouse.

The Paragon Electric Sales Company, formerly at 1103 Widener Building, Philadelphia, Pa., and warehouse located at 607 Arch Street, that city, recently removed its offices to 134 North Seventh Street, where it has the advantage of a combined office and warehouse.

A School of Vacuum-Cleaner Salesmanship



A "school of salesmanship" has been organized by the P. A. Geier Company of Cleveland for the education of retail appliance men. The two weeks' course includes study of modern factory production methods, shop practice in repair work and lectures on the fundamentals of mermerchandising by executives of the company, as well as intensive training in the demonstration and sale of the company's products. "It is our aim to give these

young men a true insight into the principles which govern all successful retail business; we are not interested merely in turning out parrots who know our particular 'line' of selling talk," asserts Carl M. Randel, director of sales. "We are confident that a school of this kind, conducted upon broad lines, is a practical contribution toward raising the standard and increasing the efficiency of the electrical retail trade."



My Sidewalk Picture-Gallery

I manage the window and sign lights for many merchants. Good window lighting and my regular management together made some streets so attractive at night that mere street lighting became insignificant.

The Cheapest of All Advertising

The retailer who neglects to show actual goods in his own windows, properly lighted, every night, throws away the cheapest and best advertising available to him and retards the development of his store's location, HE NEEDS ME.

I am a TORK CLOCK

I turn electric lights on and off regularly.

Wind me once a week and I do it every day at the hours you set.

My first cousin, TORK TIMER, turns 'em on and off only once whenever you set him. But you should see how quick you can set him.

—and you never bave to wind bim at all.

Which one of us do you need?

3 Watts per Passerby

Do you know that a retail merchant can use window lighting up to 3 watts for every person passing his store from dusk to bedtime for less than he can buy any other form of advertising? Do you know that a Tork Clock more than doubles the value of window lighting and adds less than 5% to the cost? The Tork Manual explains this fully.

Send for free copy of the TORK MANUAL of TIME CONTROLS.

Address:

TORK COMPANY · 8 West 40th Street · NEW YORK

Electrical Dealers in position to display and install Tork Clocks should apply for Authorized Dealer appointment, which includes valuable sales assistance and newspaper advertising. Applications must be accompanied by references to the electrical jobbers you buy from.



New Merchandise to Sell

Continued from sixth page preceding)

Console Neutrodyne Receiver

Electrical Merchandising, December, 1924

Electrical Merchandising, December, 1924

A walnut cabinet, of console type, encloses the new neutrodyne set announced by the Howard Radio Company, 4248 North Western Avenue, Chicago. The receiver is the Howard standard neutrodyne model, with 7 in. x 30 in. panel. The console measures 38 in. high, 18 in. deep and 34½ in. across the front. Intended retail price, complete with "Thorola" loudspeaker, is \$325.



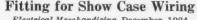
To lend just that Yule-tide touch to holly, ever-green and other Christmas wreaths, the Peerless Light Company, Chicago, has designed an electric candle which comes wired completely, with plug and which is arranged with two long pins to permit the candle to be inserted into any kind of wreath to make it an electrical wreath. This company manufactures a red rope wreath for home decoration as well as smaller size of wreath for auto decoration. Intended retail price \$1.40; with wreath, \$2.50.



Radio Set That Operates from Electric Light Circuit

Electrical Merchandising, December, 1924 Rectrical Merchandising, December, 1924

No batteries are required for the operation of the new "Dynergy" five-tube radio set recently brought out by the Dynamotive Radio Corporation, 47 Ninth Avenue, New York City, for it is made to operate from the ordinary alternating or direct electric light current. Standard radio tubes, such as 201-A or 301-A may be used. The set is completely enclosed in a mahogany or leather-covered cabinet and when closed, no tubes or dials and, of course, no batteries are in sight. Intended retail price of the receiver, for d.c., \$185; for a.c., \$235.



Electrical Merchandising, December, 1924 Electrical Merchandising, December, 1924
For use with Wiremold conduit in wiring places having narrow dimensions, such as wall cases, store windows, show cases, etc., the American Wiremold Company, Hartford, Conn., has designed its No. 5,720 fitting which has a base with exceptionally long tongues to provide a rigid connection with both No. 500 or No. 700 Wiremold conduit, and a cover equipped with a male nipple to take any standard 1-in. socket for reflectors.



Electric Egg Boiler

Electrical Merchandising, December, 1924

Water poured into the cup of the new "Steamatic" egg boiler brought out by the Hankscraft Company, 2317 Winnebago Street, Madison, Wis., drips down to the metal plates on the bottom, making electrical contact when the water gets between the two plates. The steam cooks the eggs and the time of boiling the eggs is determined by the amount of water used, as for instance, one dipper of water for soft boiled eggs, two dippers for medium boiled, etc. Intended retail price, 110 volts, 6 amp., for a.c. only, 4 egg capacity, \$19.50; 16-egg capacity, \$74.



Marcel Waver

The Frank E. Wolcott Manufacturing Company, Hartford, Conn., is marketing an electric marcel waver, the "Torrid," which measures 11 in. overall and has fs in. duplex waver rods. With black handle, intended retail price is \$3.50; with de luxe ivory assembly, \$4.50.





Combination Table Lamp and Loudspeaker

Electrical Merchandising, December, 1924 A double use is provided by the "Radialamp" introduced by the Radiolamp Company, 334 Fifth Avenue, New York City, for it is a table lamp that can be lighted and radio loudspeaker as well. It is 18½ in. high and is made to operate with any radio set that will accommodate a loudspeaker, no extra batteries being required. Intended retail price, \$35.

Electrically-Lighted Holly Wreath

Electrical Merchandising, December, 1924
For showroom decoration purposes as well as for use in the home, the No. 100 Christmas wreath of the Monowatt Electric Import Company, 546 Broadway, New York City, fairly radiates the Yuletide spirit. The wreath which is 17 in. in diameter, can be obtained with either green or red background. It is fitted with eight colored lamps in sparkling reflectors, connected in series, for use on 110-120-volt circuit. Intended retail price, \$5.

Bridge Lamp with Ornamental Pull Chain

Electrical
Merchandising,
December, 1924
The light of the
new brass bridge
lamp designed by
the Cassidy Company, 101 Park
Avenue, New York
City, is controlled
entirely by a tassel
switch control
which is self-contained. The arm of
the lamp is adjustable with a double
swivel. The finish is
Spanish brass and
gold. About \$75.



The H. C. Roberts Electric Supply Company, Inc., has opened a branch house at 356-358 Broadway, Albany, N. Y., under the management of E. F. Keefe. A complete stock of electrical and radio supplies is carried.

H. E. Cummings, who has been for the past four years in charge of export sales of motor-driven household appliances for the International General Electric Company, has resigned, to go with the Shelton Electric Company, 16 East Forty-second Street, New York City, as its export manager.

The G. F. Mitchell & Sons Company of Cleveland, Ohio, after three years' operation in limited territory, is organizing its "Washrite" sales force for national distribution. William Campbell has been appointed director of sales. Mr. Campbell comes to the Mitchell organization with ample experience and a record for substantial success in the washing machine industry. For four years he has been a prominent figure in the trade through his connection with the "Trojan," prior to which he was with "Eden" three years, specializing in sales promotion work.

The Henger-Seltzer Company, 1125 Wall Street, Los Angeles, Cal., writes in to correct "a story started some-

where, that we are intending to do a jobbing business. This is entirely wrong," declares Ira Seltzer. "We have leased an excellent warehouse for the sole purpose of carrying considerable stock of electric and radio material to supply jobbers only, and we have absolutely no intention of doing any jobbing ourselves. We are factory representatives of the Crescent Insulated Wire & Cable Company of Trenton, N. J., Bonnell Manufacturing Company of New York, Saylor Electric & Manufacturing Company of Detroit, Aurora Steel Products Company of Aurora, Illinois, and the Yaxley Manufacturing Company of Chicago."

Company of Chicago."

The company is opening a San Francisco office at 443 Pacific Building, San Francisco, in charge of A. M. Murton, and a Seattle office at 116 Thirteenth Avenue North, Seattle, in charge of H. T. Russell.

The General Radio Company, Cambridge, Mass., has under construction a new four-story building, in the rear of its present plant at Massachusetts Avenue and Windsor Street, which will provide an additional floor space of 25,000 sq. ft. The company expects to occupy the new building about the last of August.

The Amplion Corporation of America with head offices at 280 Madison Av-

enue, New York, has been organized to manufacture and sell the Amplion loudspeaker. This loudspeaker is the invention of E. A. Graham, head of Alfred Graham & Company, of London, England. This concern originated and made the first loudspeaking telephone twenty-five years ago, and has equipped the British and other Navies, together with a large number of our mercantile vessels since then. The Amplion is declared to be the largest selling loudspeaker in Europe.

The Sangamo Electric Company, Springfield, Ill., has appointed L. Brandenburger as its agent at Salt Lake City, Utah. Mr. Brandenburger has long been connected with the electrical industry and represents, in addition to the Sangamo Electric Company, the Delto-Star Electric Company, the Wagner Electric Corporation and The States Company and the Roller-Smith Company.

The Michell-Rand Manufacturing Company, 18 Vesey Street, New York City, has devised a new and more convenient way of distributing its samples of hard maple armature wedges. Heretofore these samples were attached to a card; under the new plan the wedges are sent loose in an envelope, each wedge being numbered, which enables them to be more readily tested for size in the armature. The envelope in which the wedges are contained shows the style number, thickness and price of the wedges and has an eyelet at the top for hanging in a convenient place, ready for instant use.

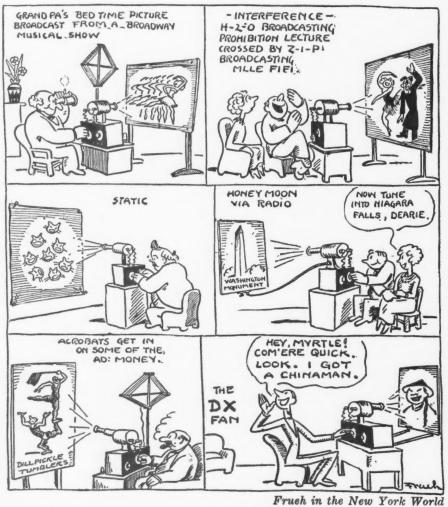
The P. A. Geier Company of Cleveland, O., has completed a four-story reinforced concrete addition to its factory. With this addition the Geier plant will have approximately three times the floor space previously occupied.

The Electric Club of Rochester, Minn., was recently organized for the purpose of co-ordinating the various electrical interests, with the primary purpose of putting on the Home Lighting Contest locally. The officers are C. G. Hadley, superintendent of the City light plant, president; Geo. L. Morrison, contractor, vice-president; Leonard Hiss, contractor-dealer, treasurer; and E. M. Raety, contractor-dealer, secretary.

The A. J. Johnson Company, 21" North Desplaines Street, Chicago, Ill. manufacturer's agent and exclusive distributer of "Superior" rubber and friction tape, "Utilco" appliance plugs and cord sets, and "McKay" lamp frostings, has enlarged its quarters at the above address. The company solicits inquiries from manufacturers who desire representation in the Chicago territory.

The Sibley-Pitman Electric Corporation, with warehouse and offices at Sixth Avenue and Thirteenth Street, New York City, announces that its Brooklyn Jobbing House located at 56 Myrtle Avenue, formerly the Brooklyn Electrical Supply Company, which was purchased by them about two years ago, will move to larger quarters at the corner of Clinton and State Streets, Brooklyn.

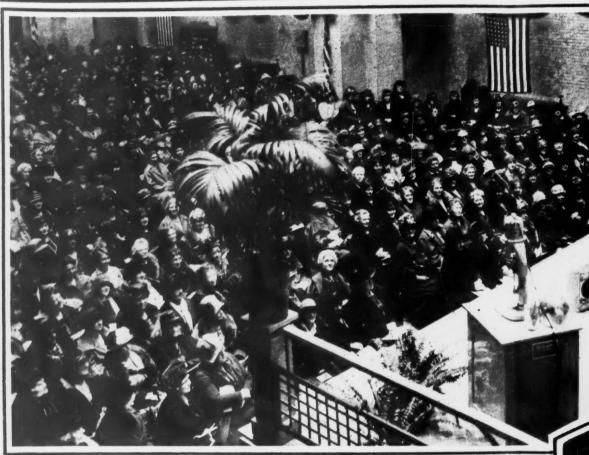
'Now That Pictures by Radio Are Predicted-



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Convention

Incidents of the Year's Progress as Shown



HOUSEWIVES LEARNING TO COOK—And proof enough that the American woman wants to know more about the uses of electricity in the home. A recent cooking school in Boston. From Electrical World.



N.E.L.A. Pictorial

Shown in Photographs—from the McGraw-Hill Electrical Publications



Convention

Incidents of the Year's Progress as S



HOUSEWIVES LEARNING TO COOK—And proof enough that the American woman wants to know more about the uses of electricity in the home. A recent cooking school in Boston. From Electrical World.



THE MOST TALKED OF WATER POWER IN THE WORLD—An airplane photograph of Muscle Shoals—in its present status of development, the prize for which the South and the farmer back Ford against the field. From Electical World.

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on N.E.L.A. Pictorial

ss as Shown in Photographs—from the McGraw-Hill Electrical Publications



STILL FLOCK-ING TO THE "HOME ELEC-TRICS"-This one was in Worcester, Mass., where thousands went to study the uses of electrical appliances in the natural setting of a living home. From Electrical Merchanlising.

WHERE WILLIAM PENN ONCE MET THE INDIANS— The Philadelphia Electric Company completes its Delaware Station. The first half was built of solid concrete during the war, when steel was not available. From Electrical World.



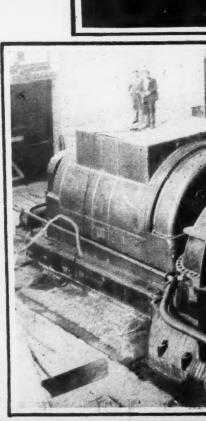




"UNTOUCHED BYHUMAN HANDS"— The New England Power Company's automatic station in Vermont.— Electrical World.

ADDING. 30,000 RETAIL OUT-LETS—The hardware dealer becomes an active advocate of "doing it elec-trically." From Electrical Retailing.

THE BIGGEST THING ELEC-TRICAL IN NEW YORK— New Hudson Ave. Station, Brook-lyn, which will produce 400,000 hp. From Power and Electrical World.



GHT H E

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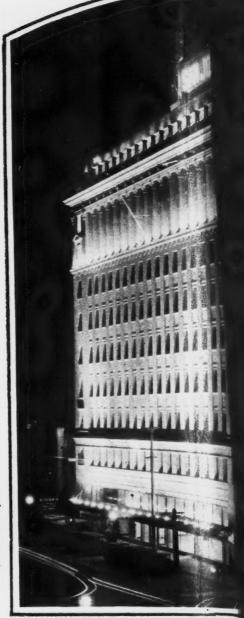
more than From



THE CURRY COMB TAKES THE COUNT— Even the stars of the musical stage are now using electricity in their business. Edith Day, leading lady in "Wild Flower," grooms her leading donkey with a vacuum cleaner. From The Home Electrical.

ELECTRIC TRUCKS PUT ON A SHOW ALL BY THEM-SELVES—New York Edison Company turns the limelight on the electric truck by staging a Truck Show featuring street and industrial trucks, tractors and cranes, and a parade of 400 vehicles up Fifth Avenue. From Electrical World.

Baker



LIGHTING A MONUMENT POWER—New Building of the Joaquin Light and Power Co Fresno, Calif., a model utility he quarters with a splendid ground fi sales room. From Journal of Electric



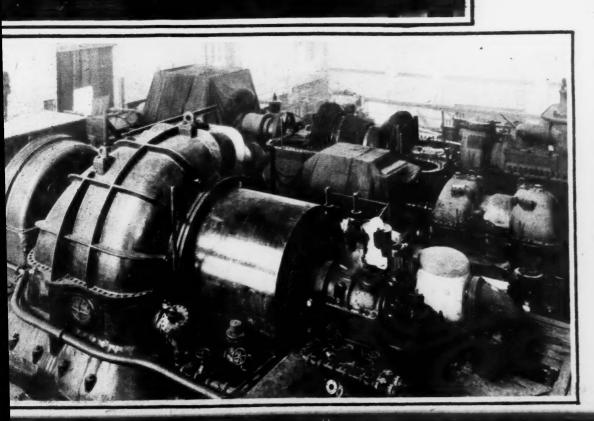
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To all men news is the city has its eagerly restidings to the people.

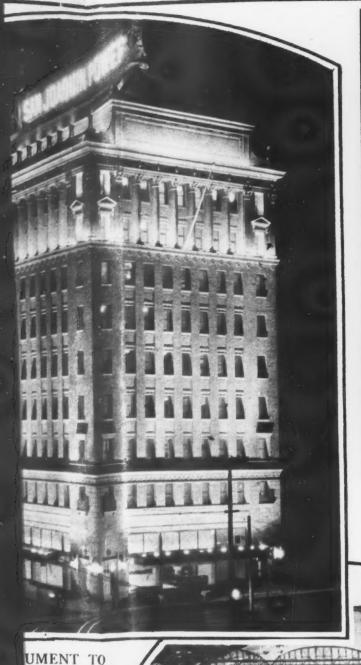
—the community of and needs its news no for electrical men is today so perfected in great electrical public ored, vital institutions.

What is this news?

What is this news? recording of the thing







ng of the San ower Corp., utility headd ground floor

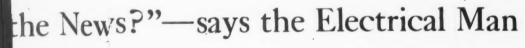
al of Electricity



MAKING BILL PAYING A PLEASURE—Centralstation customers paying their bills in a Chicago dealer's handy neighborhood store. From Electrical Merchandising.



WHERE COAL DUST REIGNS-The newest and greatest convert to powdered fuel—the Ca-hokia Station of the Union Electric Light and Power Company, of St. Louis-which will ultimately have a capacity of 300,000 kw. From Power and Electrical World.



e spice of daily life. Every d newspapers to bring the The industrial community electrical men-desires less. Gathering the news a vast enterprise and is its development that the ations have become honof the industry.

It is the reporting and s that happen, the acts, the achievements and the events affecting electrical men of every kind throughout the world. It is also the interpretation of these acts and these achievements and these events and the opinions that men whose thinking is important, express about them.

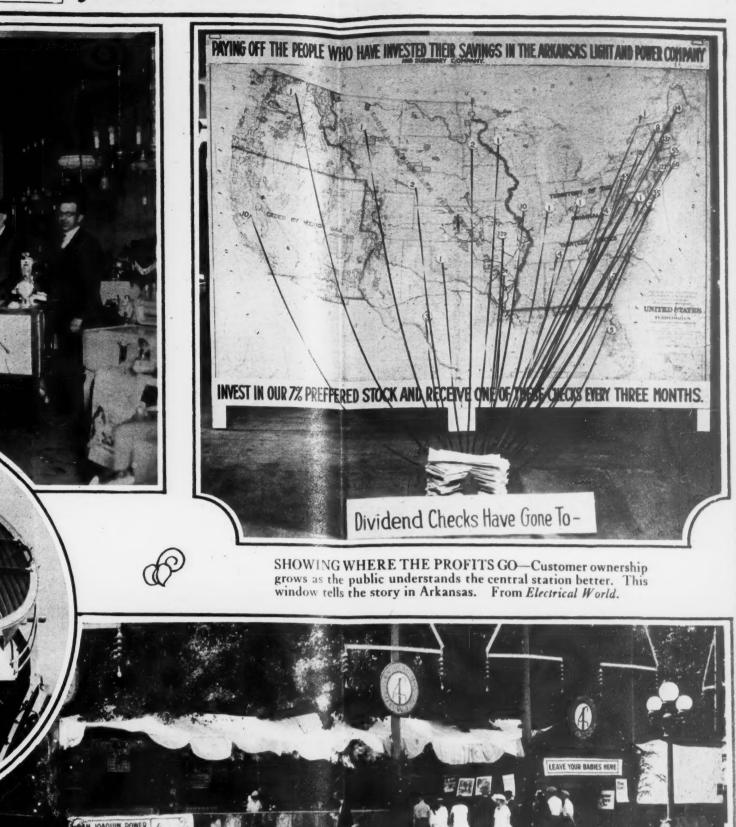
The electrical industry looks to the electrical press to procure and provide the news. It relies upon it to present and preserve the written record of the experience and advancing thought of electrical men, the progress of this industry.



ELECTRO MAH JONG CAFÉ A LA PERC—Olga Petrova, the famous Russian author and actress, now starring in this country in "Hurri-cane," turns from the ways of her mothers, and makes her black coffee in an electric samovar. From The Home Electrical.

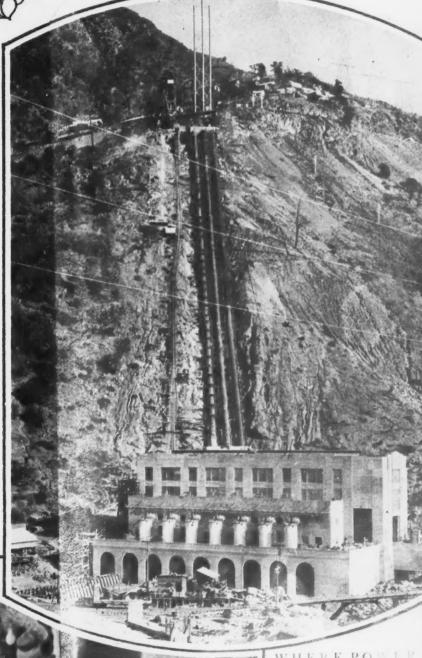
DETROIT
TRIES SOME-THING NEW IN TROLLEY CARS -In spite of all the motor cars Detroit is traffic-bound like other cities, and has turned to threecar, four-truck, articulated street railway trains, taking power from a single trolley. From Elec-tric Railway Journal







"MINDING THE BABY" NOW A PUBLIC SERVICE—The San Joaquin Power Company installs a Free Day Nursery at the State Fair and cares for several hundred kiddies—something new in public relations. From Journal of Electricity.



WHEREPOWER
ROLLS DOWN HILL
"Big Creek"—The factor of the Southern California Edison Company, and virtually the heart of the power supply for the southern section of the Pacific Coast. From Electrical World.

ELECTRICITY FOOLING THE FOLIAGE—

ELECTRICITY FOOL-ING THE FOLIAGE—An "electric hot-house" where experiments are being carried out in the artificial stimulation of plant life to develop a practical method of forcing vegetables and flowers for an earlier market. From Electrical Merchandising.



JAMES H. McGRAW, president, McGraw-Hill Company, and pioneer publisher of industrial journals, who has guided the principal papers of the elec-

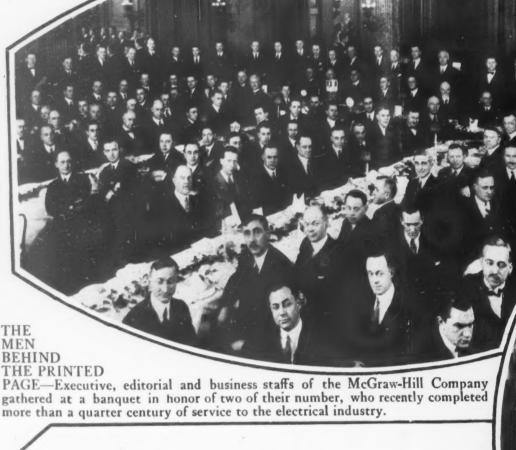
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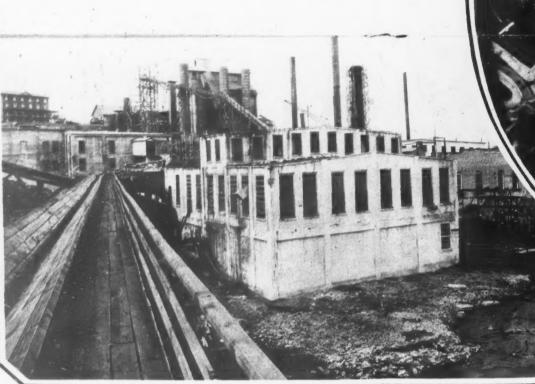
years.



WHERE THE COPY of the editorial and ex pany. Headquarters



more than a quarter century of service to the electrical industry.



CASTING METAL INT THOUGHTS—This bank McGraw-Hill linotype machine aided by the monotype and har composition rooms, casts at sets the metal for approximate 25,000 column inches every wee

WHERE A LOG BECOMES ROLL OF PAPER—The M Graw-Hill paper mill at Newto Falls, N.Y., where paper is may for fifteen McGraw-Hill public tions that serve seven industric

McGraw-Hill Service to the Electrical I:

HE character and trend of electrical news has vastly changed in the last fifty years, since the Electrical World began to serve electrical men. The cumulative development of the multiplying applications of electricity has been steadily pyramiding not alone the news but the need for news. For no man's school-learning has sufficed him long in the face of the rapid evolution of electrical experience and opportunity.

With this growth has naturally come specialization. And the electrical press has trended with the times, expanding with the industry, until today there is a specialized paper intimately serving every important

group of electrical men. Beginning with the Electrical World, the earliest electrical industry publication, the progress of electrical development has been marked by the successive appearance of five other McGraw-Hill electrical journals to lead and serve in some definite field. They are

Electrical World—Published weekly, the "master" executive and engineering paper, the weekly newspaper of the electrical industry, written alike for the central station man, the electrical engineer, the electrical manufacturer and jobber, and the large contractor, reflecting broadly the activities, problems, opinions, and progress of all groups of the industry.

Electric Railway Journal—A weekly, devoted entirely to the service of those electrical men who are engaged in the street railway industry. Electrical Merchandising—Issued monthly to the commercial executive, appliance sales manager and salesmen of the central station; the electrical dealer and contractor, and the manufacturer and jobber of appliances, lighting equipment and wiring materials.

Electrical Retailing—A pocket-size monthly paper for the electrical merchant who sells electrical appliances as a profi

Industrial Engineer—A monthly, talking directly to the men of large industrial works of the country, describing and discussin operation and maintenance of electrical and associated mechanisms. Journal of Electricity—A semi-monthly publication specified for the great electrical community of the Pacific Coast local electrical industry paper.

And with these should be also mentioned-

Power—Although not an electrical paper, it devotes space week to practical electrical problems of the industrial and pr plant, written for men who have come up through the steam e

The Home Electrical-A small pictorial telling the popular sto electricity in modern living, for distribution to the custome central stations and dealers.

Every one of these publications has sprung from industry itself in response to a need and a demand. the electrical press is an institution of the elect industry, established and supported by the indu for the dissemination of information to electrical Without the knowledge that comes to electrical through the electrical press—through these McC Hill electrical papers—the electrical industry could have grown to its present greatness. Unless this trical press continues to serve electrical men in ac ance with their changing needs, the industry cannot to realize its great future.

McGraw-Hill Company, Inc., Tenth Avenue at Thirty-sixth Street, New York

James H. McGraw, President

Electrical World Electrical Merchandising Electric Radway Journal

Electrical Retailing Journal of Electricity Industrial Engineer

American Machinist Engineering News-Record Ingenieria Internacional

Engineering and Mining Journal-Press Chemical and Metallurgical Engineering American Machinist—European Edition

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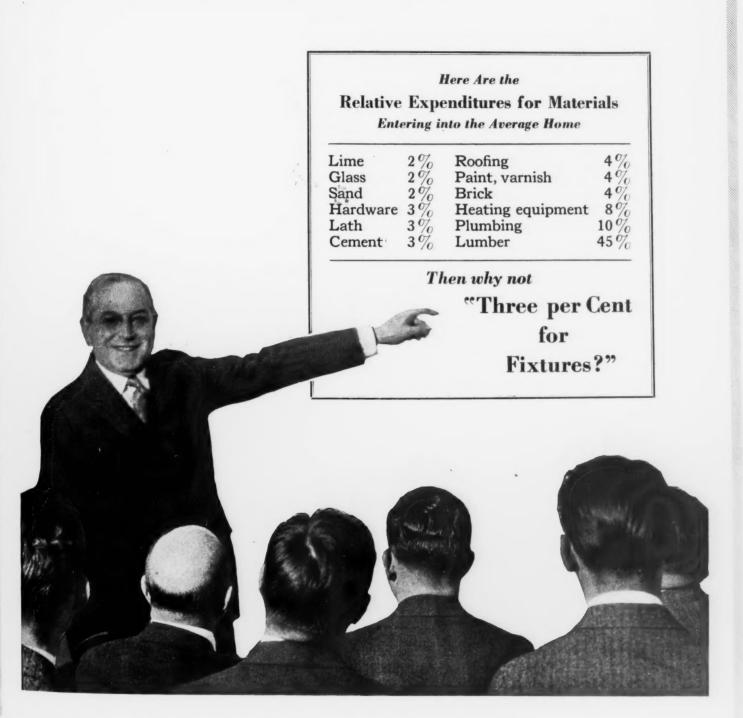


Power
Coal Age
Bus Transportation



Electrical Merchandising Pictorial

A Monthly Picture Section of Sales Ideas



"If the hardware man gets 3%, the painter 4%, and the plumber 18%, then

"Why Not Three per Cent for Fixtures?"

demands Herman Plaut, president of the National Council of Lighting Fixture
Manufacturers

"Each Great New Hotel Sets Cu



SEVERAL distinct novelties in lighting fixtures, mark the new Statler. Both unique and appropriate is the "globe" ceiling fixture in the hotel library, with its enclosing rings of zodiacal signs, all done in bronze. And a corresponding novelty is the beautiful "full-rigged-ship" fixture in the grill, pictured on the opposite page.

MASSIVE polychrome lighting fixtures illuminate the main dining room, pictured above. Bracket fixtures on the side walls of this great room in the Italian Renaissance, follow the design of the central luminaires. And in the dining loggia, shown below, the fixtures harmonize well with the trellised ceiling.





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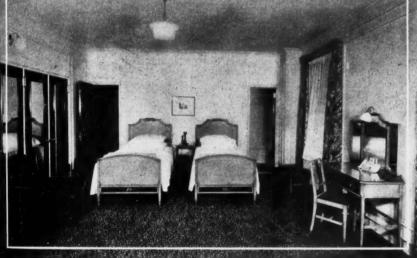
The Lighting Equipment of the New Statler, at Buffalo, N. Y.

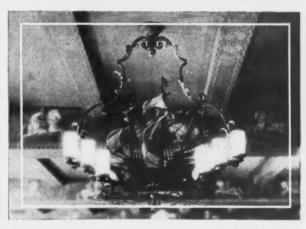
It IS an axiom in the selling of lighting fixtures, that a new hotel or other important building invariably exerts wide influence in setting current styles for residence lighting equipment. For the average householder or layman forms his ideas of the new designs and motifs in fixtures from the lighting equipment nearest at hand which he considers authoritative—usually that installed in the corridors or rooms of the latest popular hostelry.

The pictures on these pages show the service of the service in the service of the serv

The pictures on these pages show the attractive way in which the lighting of one of America's greatest new hotels has been handled—the fixtures in the New Statler, recently opened at Buffalo, N. Y.









Electrical Merchandising Pictorial, January, 1924

Over 32,500 sold in Metropolitan

This, we believe, is the most phenomenal sales accomplishment ever recorded in any comparable district.

Within a radius of fifty miles of the City Hall of New York, over 32,500 Eureka Vacuum Cleaners were sold during 1923. This astounding volume of sales represents an increase of 50% over the year 1922 when 21,900 Eurekas were sold. Yet even more significant is the fact that during 1923, in that small congested area, one Eureka was sold for every 29 wired homes.

It is estimated that the combined electric cleaner manufacturers, pro-

ducing seventy different trade-marked cleaners, sold approximately 90,000 cleaners within the 50-mile radius during 1923. As Eureka sales alone accounted for 32,500—or 34% of the estimated total, it is reasonable to assume that Eureka sales equaled (in units sold) the combined sales of the next two leading makes of cleaners in the Metropolitan New York market.

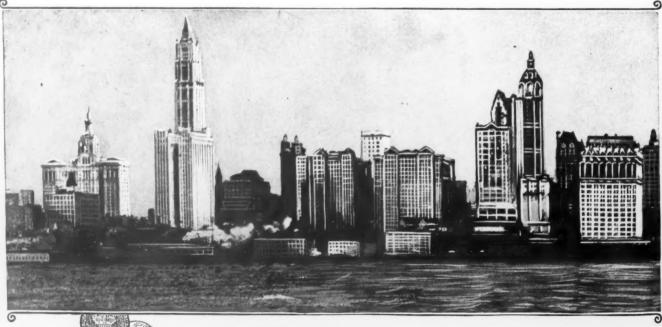
The Metropolitan New York district is recognized as one of the most difficult selling territories in the world. The great number of apartment houses and other obstructive conditions, form a terrific impediment to direct selling.

Scienti

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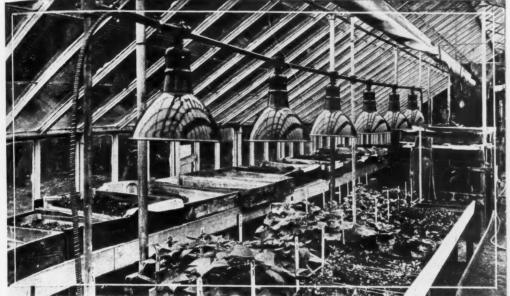
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LIGHT in the News of the Day



Stimulating "Growth of the Soil" Electrically

Electricity's newest debut is in the field of agriculture. Experiments by the Westinghouse Company, at Baldwin, L. I., prove that electric light has the same heliotropic effect on plants as the sun's rays. Through the stimulus of the light of six 500-watt lamps, the plants shown in the picture are said to have grown at twice their normal rate.

Lamp of Great Curative Properties

Scientists now concede to the quartz lamp practically all the curative properties inherent in the sun's rays. This lamp is rapidly being adopted by hospitals and institutions all over the country, and provides another example of the usefulness of the electrical idea. Here are shown children of the Lymanhurst School-Hospital of Minneapolis, Minn., receiving their sun baths by electricity.



World's Most Powerful Light

Elmer A. Sperry, who for over forty years has been inventing electrical equipment, is still active in the field of electrical science. His new light, called the "chemical arc," gives a beam of 1,400,000,000 candlepower, and can be seen at a distance of 30 miles. Prediction is that it will revolutionize light-house practice for navigation purposes and also be of useful service in night aviation.



Dining a la Luminaire!

Twelve guests were banqueted in the chandelier recently installed in the million-dollar Masonic Temple at Davenport, Iowa. This fixture, twelve feet in diameter and more than a ton in weight, is said to be the largest of its kind in the world. Seventy lamps furnish 15,000 candlepower, and consume 16-kw.

Simplicity Gives you the Winning Sales Argument

|Comparing it point for point and price for price, with any washer, singles it out as one in a class by itself.

This same simplicity of design and engineering eliminates those troublesome service calls that eat into your profit and retard local good will.

The gain in net profits per dealer is proof of Sunnysuds mechanical superiority and the fact that total sales for 1923 are THREE TIMES greater than 1921 is proof that Sunnysuds dealers have a distinct sales advantage in "The Washer That Stays Sold."

The success of twelve hundred dealers has made this record possible. Why not be one of the increasing number for 1924?

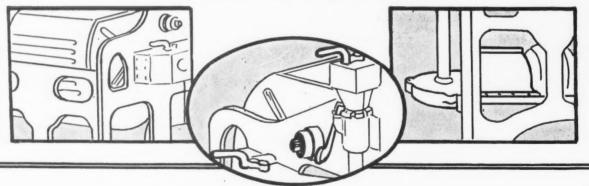
The full Sunnysuds record is yours for the asking. Mail your request today.

SUNNY LINE APPLIANCES, Inc.

Factory: DETROIT, MICHIGAN

Sales Department: MANSFIELD, OHIO

Canadian Factory: Kitchner, Ontario Export Dept.: 149 Broadway, New York



SIICES Electric Washer Washer Washer

Electrical Merchandising Pictorial, January, 1924

Electrical Merchandising Pictorial

A Monthly Picture Section of Sales Ideas



Is There a Home Behind the Customer?

Mrs. Jones Is a Customer Now-Behind Her (and the Many Other Mrs. Joneses) There May Be a Market That Has Never Been Reached

"How can I get more customers?" asks every retail merchant. The most obvious answer is other side of town, the towns around."

In other words, "stretch your map!"

"Stretching the map" can be applied to every they will help you.

customer as well as to a territory. Every human being that patronizes a store has re-"cover a wider territory—the next street, the latives, or friends, or acquaintances. Reaching them is not impossible. Suggestions are everywhere and on the following pages. Perhaps

Reaching the Rest of the Family-thru

Mrs. Jones is a new customer. Mr. Jones has never been into the store. *Is there* a "Mr." Jones?

Here's what one dealer did to find out:

He set a furnace control out near the front. After waiting on Mrs. Jones one day he walked by it and casually remarked — "There's a clever thing—who takes care of the furnace at your house?"

"Oh," she said, "that's Mr. Jones' job."

"How can I show it to him?" observed the dealer, as though musing aloud.

"I'll tell him about it—no, I'll bring him in the next time we are going by."

Yes, Mr. Jones came in—and saw a lot of other things in electrical devices he never knew existed.





Mr. Smith drops in occasionally. His purchases have never amounted to much—just a few lamps. Has he a family? The dealer does not know and hesitates to ask. But Mr. Smith is chatty and is inclined to linger in the store. One day, pointing to a radio set, the dealer said:

"Funny thing about radio. I don't sell many of 'em to women. I wish I could get some woman

to tell me the real reason. Know anyone I could ask?"

"Sure," said Smith. "I'll bring the wife in some time and have her tell you."

He brought her in that night and the dealer never knew until later that Smith would have bought a radio set months before had his wife not opposed it. She tried it and bought it.

the Member Who Is a Customer Now



There's Mr. and Mrs. Brown. They have never bought much. They may have children—and again they may not. But it does no harm to try and find out. Interesting them on the side of the children, may be the means of interesting them in other electrical devices for the home.

Besides, men and women are only big children. Show them a toy iron or washer, an electric engine, a train, a doll house electrically lighted, and watch them play.

You'll soon know whether they have children at home or nephews and nieces in other homes. And people never forget that which touches their sentiment.



Children are an easy point of contact. Mrs. Johnson is a customer and sometimes comes in with her little girl.

One dealer says: "I always talk to little Mary and Johnny. They let out many family secrets that suggest new opportunities. For instance, I asked one little girl if she had a dolly at home. She said 'Uh-huh. My Dolly sleeps with

Gramma. She keeps my Gramma's back warm.'

"Well, I made a mental note of that and some time later I sold Mrs. Johnson an electric heating pad for Gramma's back."

Every customer lives somewhere. Reach for the home behind the customer. It is alive with electrical needs that every dealer can supply.





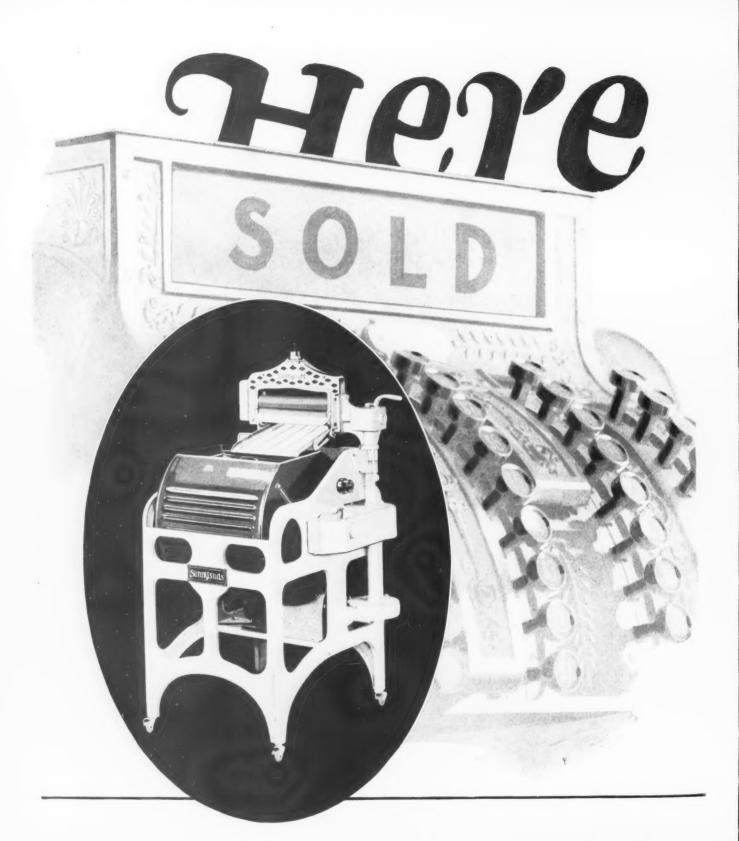
Rayl Company and the Crowley-Milner Company, three of the most prominent stores in Detroit—in all of which there are well organized Eureka departments operated in connection with the direct selling organization of the Eureka factory.

There is a ready market in every community for the product that proves its own high quality as clearly as the Eureka. If you are interested in a permanent and profitable growth in your vacuum cleaner business, the Eureka Sales Manager for your territory will be glad to arrange an appointment. Write or wire, direct to the factory.

EUREKA VACUUM CLEANER Co., DETROIT, U.S.A.

Makers of Electric Vacuum Cleaners since 1909
Canadian Factory, Kitchener, Ontario; Foreign Branch,
8 Fisher Street, Holborn, London, W. C. I., England. (1





SUMMELI

is where the Sunnysuds dealership counts

O The Sunnysuds is inexpensive to buy. That attracts prospects.

O It is inexpensive to operate. That makes owner-loyalty a secure and powerful influence.

O It is inexpensive to service. And that means you keep the profits you make.

O These are the kind of sales influences that register profit-in-the-bank. You have them when you sell the Sunnysuds.

Of Twelve hundred dealers endorse every word of the advantages we cite in Sunnysuds selling. Do you want to *know* these advantages?—Send a postcard!

SUNNY LINE APPLIANCES, Inc.

Factory: DETROIT, MICH.

Canadian Factory:
Export Dept. 149 Broadway, New York

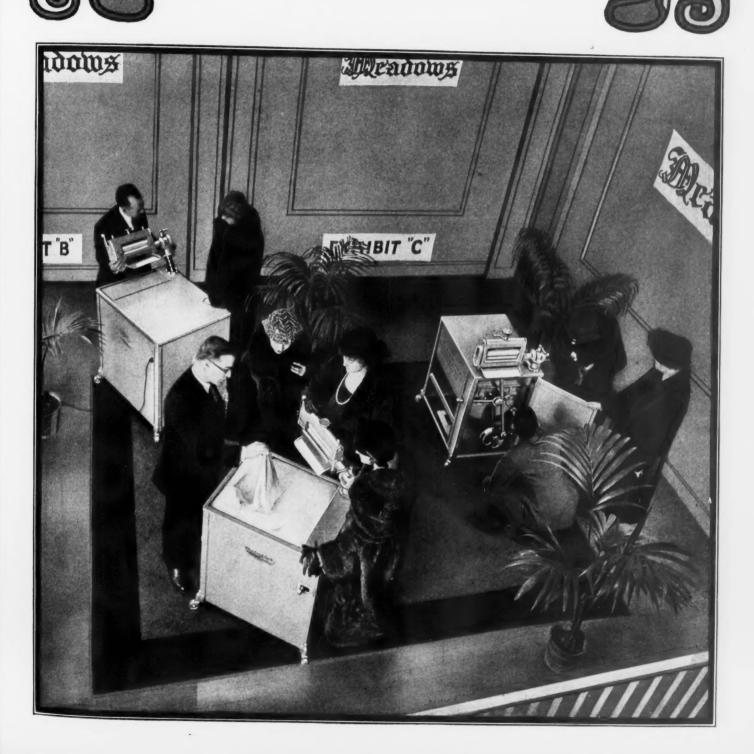
Kitchener, Ontario
Export Dept. 149 Broadway, New York



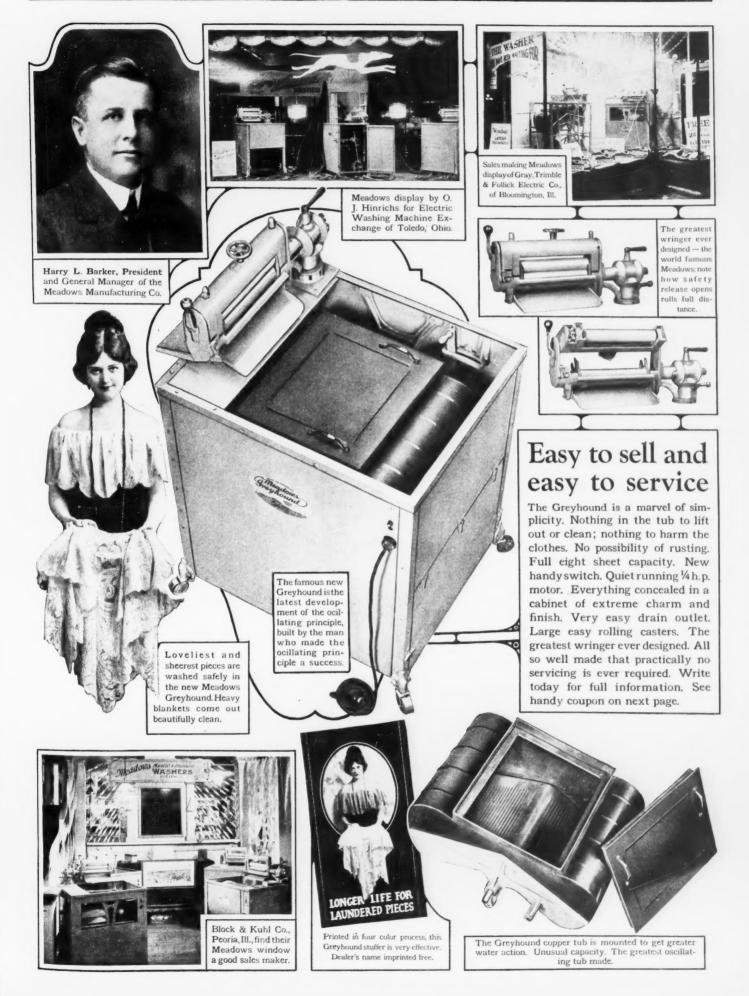
SIII SElectric Washer & Wringer

electrical idea. For, in addition to the parents who took advantage of this "baby parking place," hundreds of visitors stopped to watch the children and to see how they were cared for by trained attendants with electrical milk This unique booth of the San Joaquin Power Company at the recent Fresno County (Calif.) Fair, will suggest to many electrical dealers and central stations a way to use exhibit spaces to win friends among the general public and to interest whole families in the warmers, grills, refrigerator, etc. A brown bear, captured by company employees up in the mountains, helped attract the crowds, who stayed to read the electrical story from the posters for themselves. Some forty infants were checked and turned over to the care of the three trained nurses by grateful mothers. Certified milk, keptinanelectric refrigerator and heated in electric milk warmers, was furnished by the company.

Electrical Merchandising Pictorial, February, 1924









Electrical Merchandising Pictorial

A Monthly Picture Section of Sales Ideas



The Value of a Smile

"He who cannot smile should never keep a shop"—Confucius, 500 B.C.

OUT on the Pacific Coast a lot of hardheaded business men are now promoting an industry "smile campaign" to get their electrical selling people to "smile always" in their contacts with the public. Which suggests that sunny smiles have a real money value in moving merchandise real money value in moving merchandise and speeding sales.

memory, was in print 2,300 years ago, reminding the salesmen and saleswomen of the world of the business value of a shining countenance.

But it has remained for a Missouri jury to his smile. Thich suggests that sunny smiles have a fix the value of a smile in dollars and cents. It all happened this way. A little boy was injured through corporate negligence, so that never again in his life will he be able to the smile.

Solution as remained for a Missouri jury to fix the value of a smile in dollars and cents. It all happened this way. A little boy was injured through corporate negligence, so that never again in his life will he be able to and see.

smile. His parents sued for damages in his behalf, and when the case went to the jury a unanimous verdict of \$20,000 was returned in the boy's favor-\$20,000 for the loss of

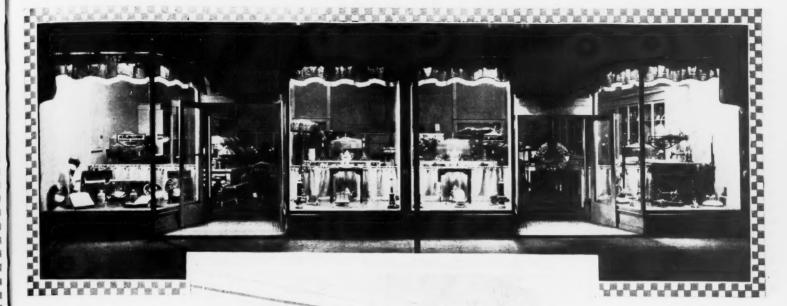
Electrical Stores That Smile—and Why!



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For Stores That Win Are Stores That Smile



Above. Who could pass the store of K. W. Jacobs of Santa Rosa, California, and not feel the impulse to linger before these "smiling" windows and enter the inviting doors? Sales are often more than half made by a friendly attitude, and stores reflect the spirit of their owners. There is no "frown" in these wide and tastefully-dressed windows or in the store, the whole interior of which may easily be seen from the street.

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" section ppliances nple and ngement. and fixctions. I.est. An interior view of the K. W. Jacobs store, pictured above. Here again light and cheery walls and ceiling shed their influence around and about. The light finish of wallcases and showcases makes them a pleasing background for the appliances.

Below. A salesroom of the Texas Power and Light Company, with its comfortable-looking wicker lounge and rocker up in front for the use of tired shoppers. The store, as well as the young lady at the right, smiles!



Electrical Merchandising Pictorial, March, 1924



Over 10,000 Grand Prize sold at retail—probably the record ever established by an

Through seventeen retail stores, together with temporary campaigns in small near-by towns, The United Appliance Company* in 1923 sold the stupendous total of 10,150 Eureka Vacuum Cleaners.

This is an average sale of one Eureka to every 20.3 wired homes.

Allowing for the large number of electric cleaners already in use, the proportion of Eureka sales to possible buyers is even more astounding.

This clearly indicates the soundness of the merchandising method under which the Eureka company assumes the management and operation of

*The United Appliance Company is the merchandising division of the Consumers Power Company. It operates through seventeen retail stores.

UNITED APPLIANCE CO.



TED APPLIANCE CO. PEORIA ILL.

> UNITED APPLIANCE CO. JACKSON MICH.

The

Grand Prize



EUR

United Appliance Co. 138 in 1923

Eureka Vacuum Cleaners greatest vacuum cleaner selling individual retail organization

permanent Eureka departments in the stores of its large dealers.

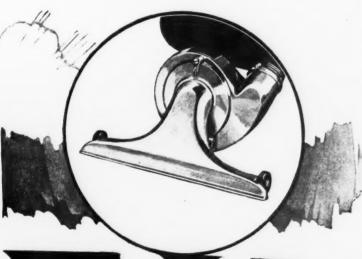
Furthermore such a record—in the face of hot competition by sixty-nine other "makes"—would not be humanly possible if the Grand Prize Eureka were not generally accepted as the greatest value money can buy.

If you want your own vacuum cleaner business to show steady and permanent growth, we invite a meeting with the Eureka Sales Manager for your territory. Write or wire!

EUREKA VACUUM CLEANER Co., DETROIT, U. S. A.

Makers of Electric Vacuum Cleaners since 1909 Canadian Factory, Kitchener, Ont.; Foreign Branch, 8 Fisher Street, Holborn, London, W. C. 1, England

128



United Appliance Company's 1923 Net Sales

The Seventeen Towns in which Retail Stores are operated	Net Sales	Resi- dence Meters
*Grand Rapids, Mich.	1504	18,904
Flint, Mich.	1156	16,344
Jackson, Mich.	859	7,428
*Evansville, Ind.	729	14,210
Peoria, Ill.	687	15,22
Akron, Ohio	611	34,73
Kalamazoo, Mich.	516	7,66
Battle Creek, Mich.	514	8,13
Saginaw, Mich.	480	7.98
Springfield, Ill.	446	8,45
*Muskegon, Mich.	400	5,92
Pontiac, Mich.	397	8,56
Springfield, Ohio	393	13,00
Bay City, Mich.	340	13,71
Owosso, Mich.	208	5,98
Cadillac, Mich.	69	1,95
Manistee, Mich.	30	1,38

Total net sales produced through temporary campaigns in near-by small towns covered by United Appliance Co.

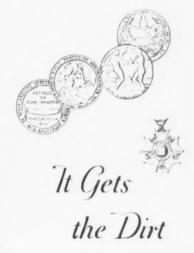
811 16,608

Grand Total 10,150 206,223

'In addition to above sales, other dealers sold 749 Eurekas in 1923.

> This is an average of One Eureka Sale by the United Appliance Company to every 20.3 residence meters.

EKAACHER



Electrical Merchandising Pictorial, March, 1924

What a Sales



Picturing a meeting of the New-Business Department of the Ohio Public Service Company, of Mansfield, Ohio, by whom this remarkable sales record was made. This organization which is under the management of C.L. Dunn, is a property of the Henry L. Doherty Company.

SUMMIN

Record this is!

115 Sales in One Month, in a City With Only 2500 Possible Buyers

If you do not yet realize what incomparable selling advantages there are in a Sunnysuds dealership, look at the record of this one merchant.

In the single month of January, 1924, the Ohio Public Service Company, of Mansfield, Ohio, sold one hundred and fifteen Sunnysuds Electric Washers at retail.

There are fifty-five hundred wired homes in Mansfield. Three thousand electric washers were already in use—including a high proportion of Sunnysuds washers—leaving only twentyfive hundred probable buyers.

Within one month, nearly five per cent of this whole group had considered, compared and bought the Sunnysuds.

At this rate, nearly sixty per cent of all the possible buyers in Mansfield will be Sunnysuds owners within a year.

If there is such a thing as dominating a market by offering the very finest quality; by offering advantages that competition cannot cope with; and offering these things at a price which defies comparison—then any merchant who sells the Sunnysuds can grip the bulk of the business in his locality.

Get the full facts, without obligation or annoyance. A post card will bring them.

Factory: DETROIT, MICH.



Electrical Merchandising Pictorial, March, 1924

Governor or "Mystery Bride"—Take Your Choice



Ideas to Insure Front-Page Headlines for Your Electric Home Exhibit

JUST as an actor knows the quips that bring him applause, so the Home Electric exhibitor learns the little touches that bring a smile to the visitor's face and a wermer appreciation of electric service. The little fellow in the picture below, nonchalantly drying himself in front of the electric heater, didn't have to say to visitors: "You need one of these in your bathroom, too!" This was in the Pueblo (Col.) exhibit.

Honored by the Presence of a Governor

THE presence of the Governor of the State at the opening of an Electric Home is an event certain to guarantee flattering headlines in the newspapers next day. Governors, of course, are popularly supposed to be hard-pressed for time—but an invitation based on the fact that Electric Home exhibits were the forerunners of the national Better Homes movement should at least win consideration. The visit of the Governor of Indiana to the Electric Home in Indianapolis, as shown in the photograph, was one of the events of the show.

A "Mystery Bride" Visits the Fresno Home

WHO she was, whence she came, no one knew except a few electrical men and the newspapers. But she slipped into the Electric Home one night in Fresno, Cal. (with a newspaper reporter in hot pursuit), and was snapped in the act of gazing nonchalantly at an electric dishwasher. The story ran that she had received a proposal from a man in Fresno, and had come to look him over and select her trousseau! A good story, indeed, and worth using again.

Electrical Merchandising Pictorial

A Monthly Picture Section of Sales Ideas

You Never Saw a Music Dealer Sell a Phonograph by Showing Off Its Powerful Spring Motor!



Of course not, for the real merchant sells the customer not the mechanism, but the idea of musical entertainment.

The phonograph dealer sells an article of entertainment. Instead of perplexing his customers with descriptions of springs, gears and screws, he stresses the pleasure to be had from the instrument, and emphasizes its design and finish, tonal quality and ease of operation. Mention of the mechanism is as thoroughly hidden in his sales' vocabulary as it is in the instrument itself. And not only is the retailer selling his prospects on the basis of entertainment value, but the manufacturers, also, make this theme the keynote of their advertising and booklets.

In selling sets to the great lay public, isn't it time to stop directing the customer's attention to the maze of technical parts inside the cabinet? Can't we take a hint from successful phonograph dealers and sell radio customers the idea of taking the world's choicest entertainment right out of the air?

For radio is still being sold, even to laymen, as a technical product. Buyers, in many cases, are scared away by such terms as "transformer coupling," "regeneration" and "grid bias." Radio, in its entertainment sense, can be called a sister instrument to the phonograph in that it is built to furnish entertainment, comes in a like cabinet, and reproduces sound. We can look to the phonograph industry for selling ideas.

If the electrical man wants to keep this business, he must be prepared to compete with those who are making a success of selling the idea of entertainment.



But Isn't This the Way Most Radio Sets Are Being Sold Today?

Mr. Contractor-Dealer—Do You Go Back and Sell





After the job is done the wireman leaves the house, returns to the shop, and turns in his report.

At once, the "boss" goes back, specifications and catalogs in hand, explaining to the housewife that he wishes to check up the work done by his wireman. Both the husband and wife are at home, and in talking to them he leads the conversation into the subject of electrical appliances.

A residence wiring job in any town, be it large or small, gives the contractor-dealer an entree into the home and confidence of the housewife, which competitive dealers can never even hope to secure. Through personal supervision of the job, the contractor-dealer is enabled to be on the "inside," and thus is the first to know that there are in that home outlets to be applianced, and what they are.



Them the Appliances After the Wiring Is Done?



In the living room he pauses to give a copy of "The Home Electrical" to the husband, and at the same time shows the housewife a picture of an electrical vacuum cleaner. He visualizes it standing in the room before them, tells what it will do,—and succeeds in convincing them that any wired home is incomplete without one.

For the laundry, Mr. Contractor-Dealer had suggested putting the new outlets in what he considered an appropriate corner for an electric washer and ironer. So here, too, he takes them through a "picture journey" of their laundry-to-be.

In the dining room his wireman had installed 3 outlets, including a double outlet for the dining room table. With more pictures, he holds their attention and interest while explaining the merits of table cookery. "To begin with," he declares, "you need an electrical toaster, percolator and grill, and with these you will know what a kitchen-less breakfast means."



By visualizing his appliances in this manner, Mr. Contractor-Dealer proves himself no "order-taker," but a constructive salesman. Bringing pictures and suggestion to his aid, he explains to his prospect how she can use electrical appliances to the greatest advantage in her home.

But who, other than the contractor-dealer, has the opportunity of doing this in the prospect's own home?

Eureka Launches a Nation-Wide Educational Campaign

APRIL 1st to MAY 17th

\$75,000 for National magazine advertising; \$50,000 for billboard displays; \$60,000 in newspapers; \$15,000 for direct mail material—the most powerful campaign in the history of vacuum cleaner merchandising.

In the two months of April and May, more than \$200,000 will be expended for dominant advertising to over thirty million readers of the leading National magazines; for smashing billboard displays in 154 cities having a combined population of thirty million people; in widespread and compelling newspaper advertising; and for immense quantities of direct mail material.

Through this mammoth campaign, millions of women will be urged to accept the use of a Eureka for "Free Trial During Spring Housecleaning." Unusually liberal terms are offered while the campaign is in progress. Every influence the Eureka Company

can command is being thrown to the support of Eureka dealers and salesmen in this one gigantic National Educational Campaign.

From all present indications, it seems certain that during this concerted, nation-wide program of education, Eureka dealers will establish a vacuum cleaner selling record that has never been approached.

If your efforts are not backed up by this kind of powerful factory cooperation—doesn't your own judgment suggest an immediate talk with the Eureka Sales Manager for your territory? He will confer with you at your convenience. Write or wire the factory.



\$200,000



EUREKA VACUUM CLEANER CO., DETROIT, U. S. A.

Makers of Electric Vacuum Cleaners since 1909

Canadian Factory, Kitchener, Ont.; Foreign Branch, 8 Fisher Street, Holborn, London, W. C. 1, England

131

The Grand Prize

EUR



~ in advertising Eureka's National Educational Campaign April 1st to May 17th

Summary of Eureka's Dominant Spring Advertising

IN NATIONAL MAGAZINES-

IN NATIONAL MAGAZINES—

\$75,000 will be spent in national magazines, alone, including three full pages—two in colors—in the Saturday Evening Post; Four-color pages in Ladies' Home Journal; Color pages in Good Housekeeping; full pages in McCall's Magazine; and powerful ads in Pictorial Review.

IN NEWSPAPERS—

In addition to the newspaper advertising done by Eureka dealers the factory will finance \$60,000 worth of newspaper advertising in 255 towns and cities during the two months of the Educational Campaign.

IN OUTDOOR ADVERTISING-

\$50,000 will be expended by the factory for outdoor advertising during the two months of the National Educational Campaign alone. It will cover 154 towns with a total population of 29,568,230 people, or 67% of the total population in towns of 10,000 or more.

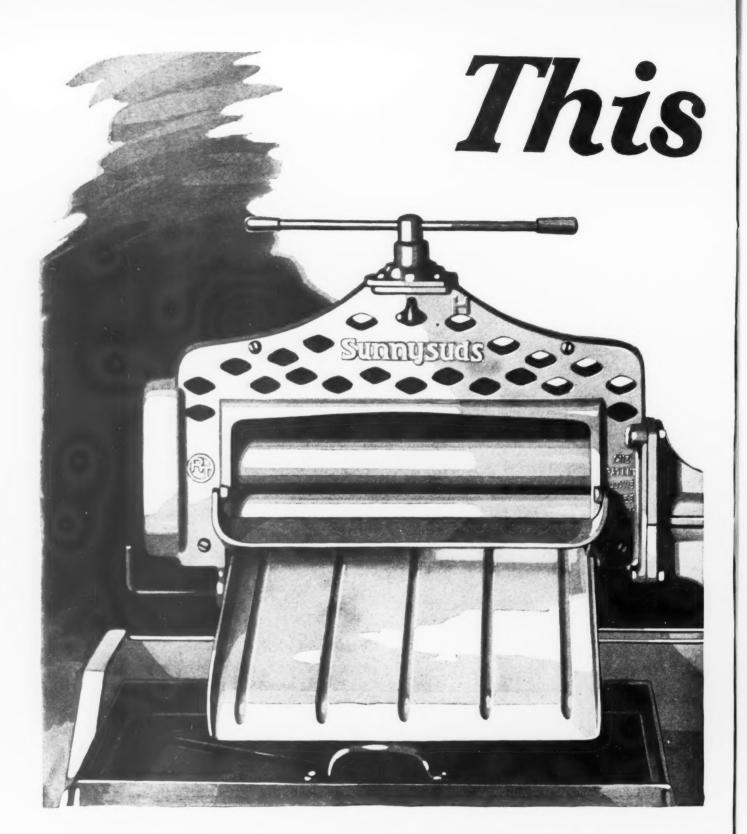
IN DIRECT MAIL MATERIAL-

Hundreds of thousands of the finest type of booklets, circulars, window banners, special stickers and other impressive sales promotion material, will be supplied gratis to all Eureka dealers.



It Gets

Electrical Merchandising Pictorial, April, 1924



SUMMEN

Fact Holds!

Amid all the hue and cry over freak designs, changes and "principles," this one truth stands out—clear and distinct.

No combination of advantages has yet been offered that can duplicate the sensible merits of the Sunnysuds—and the success of our dealers satisfies them that its dollar-for-dollar value is unapproached at any price.



Sunnysuds Advantages

All metal; pure copper tub; steel cabinet; aluminum wringer; splash proof, self-cooling motor; automatic safety switch; enclosed gears—no belts, chains or springs; automatic lubrication; white enamel finish; standard capacity; compact design.

SUNNY LINE APPLIANCES, Inc.

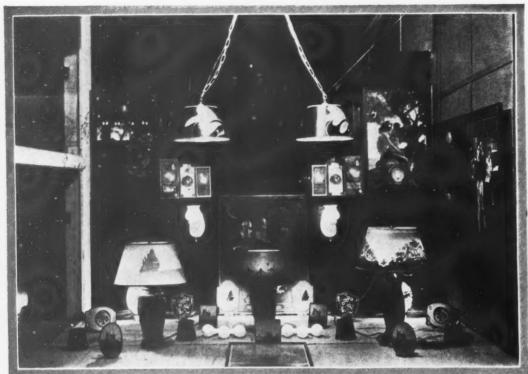
DETROIT, MICHIGAN

Factory Sales Branch: Mansfield, Ohio Canadian Factory: Kitchener, Ontario Export Dept. 149 Broadway, New York

(62)

SIIII SElectric Washer & Wringer

Windows That Lead You Into the Store

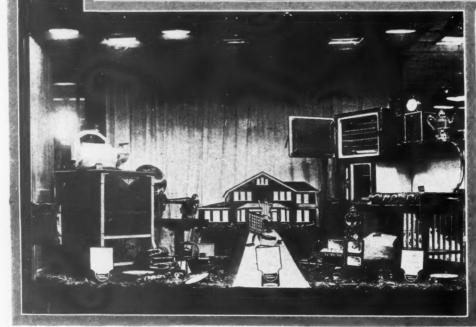


The impression the store front makes on the passer-by has much to do with the dealer's success or failure. One merchandising authority defines a window's appeal as being a "reaction negative" or "reaction positive." This may or may not be true, but it is a fact that the window must be alluring enough to the disinterested shopper to create in her a buying urge. In the simple yet effective window at the left, used by a West Palm Beach dealer, this appeal is well demonstrated. If the observer is at all interested in lamps this display will bring her into the store.

Hobrechts of Sacramento, Cal., is an electrical wonderland, and is known for its elaborate window displays. With a frontage of sixty feet and a depth of twenty feet, this window (shown at the right) conveys the message of complete electrification for the home from radio to washing machine.

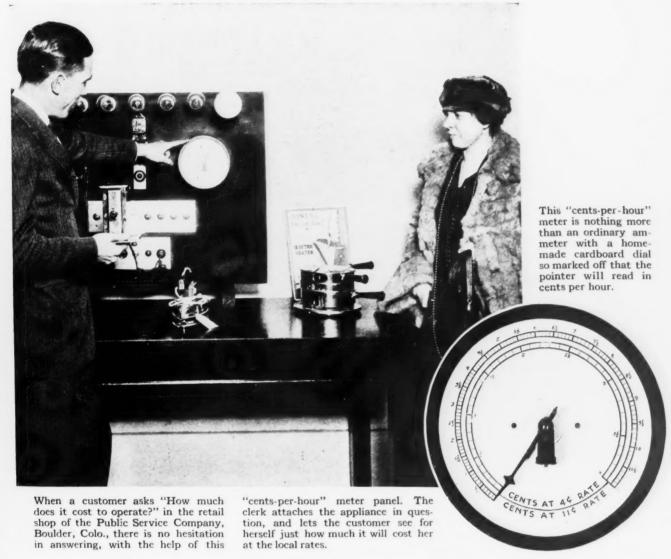
"Let these appliances walk right into your home. Electrical servants are best; they stay on the job; save your health and disposition; never tire; never quit; and never talk back." This was the message of the display shown below, put on during a spring appliance drive by McCarthy Brothers and Ford, Buffalo, N.Y.



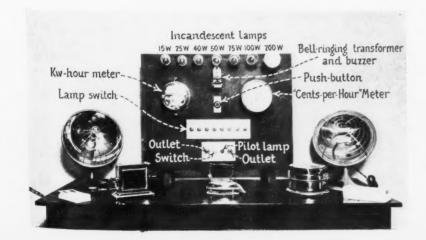


Electrical Merchandising Pictorial

A Monthly Picture Section of Sales Ideas



Showing the Customer How Little It Costs to Use Electrical Appliances



BY HAVING a standard recording kilowatthour meter on the board, the customer can be shown the actual speed the disk on her house meter travels, with various appliances and lights in use. Many customers supposed that the disk made about one revolution for every dime's worth of electricity, and they have been surprised to see that the disk makes in reality 3,000 revolutions for every eleven cents' worth.

On the board, under the row of lamp sockets for testing lamps, are a buzzer and doorbell transformer, giving a chance to explain the "creeping" of a meter caused by the doorbell transformer. Below this are the convenience outlets and pilot light for testing appliances—all of the latest type, so that customers may see how neatly convenience outlets can be installed in their own homes. The board, not including the meters, cost about \$35

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How Wausau's "White



OUT in Wausau, Wis., they have worked up something new in the art of selling electrical appliances. The Wisconsin Valley Electric Company conceived the idea of sending men out to every home—first, to tell the housewife how to renew a fuse, read her meter, and check her bills; second, to obtain a record of the appliances in use, and third, by an ingenious sales approach, to sell enough appliances

to finance the campaign and build up the residence load. They called it the "White Bag Campaign."

THE campaign began with a series of teaser advertisements that pictured a white travelling bag, and said—"Watch for the White Bag Man"—"The White Bag Man will call on you"—"What is a kilowatt—The White Bag Man will tell you," and so on until the whole town was looking for the White Bag Man. Then they sent out six trained men with white painted bags in which were sample appliances and other things. The White Bag Men won a welcome wherever they went.



THE White Bag Men all worked the same district each day, calling on every house. Here was the approach: The salesman rang the bell and when the door was opened, said, "I am the White Bag Man." Thentaking a fuse plug from his pocket—"Do you know what this is? I want to tell you how to fix your own fuses when they blow out." He was always invited in. He set down his White Bag beside the table, took off his overcoat, and went to the fuse panel with the housewife.

Electrical Merchandising Pictorial, May, 1924

Bag" Men Sold \$350,000 of Home Devices

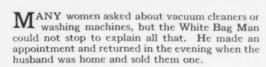


AFTER he showed her how to renew a fuse, he took a meter dial card out of his pocket and explained just how to read a meter. Then he would go back to the table where the White Bag was, and he would get out a bill form and show the housewife how to check her bills. Naturally she was interested. This man was helping her. When he got the bill out of the White Bag he lifted out a toaster and set it on the table. His scratch pad was underneath the percolator, so he lifted that out too.

THE White Bag Man never asked the women to buy. He was there to give information and make a friend. But, of course, she was interested in the appliances he put on the table, and she asked questions. He showed her how to toast bread, and at lunch time left his sample appliances whereever he was calling, to be used for cooking lunch. Call after call, day after day, the White Bag Men sold waffle irons, heat pads, curling irons, or something else out of the White Bag.

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With a population of 42,000 in three connected cities, the White Bag Campaign sold roughly \$37 per consumer as follows:

		Approximate
	Number	Receipts
Washing machines	600	\$90,000
Cleaners	425	29,500
Toasters	832	10,800
Flatirons	1,450	13,000
Percolators		9,500
Portable heaters	650	7,000
Ranges	. 60	10,000
Commercial appliances such as grind ers and glue pots		9,400
Ironing machines, dishwashers, sewing machines	J. A	9,000
Miscellaneous small appliances, such as curling irons, heating pads, engin		
heaters, fans, vibrators, etc.		15,000
Mazda lamps		53,000
Portable lamps, fixtures and wiring.		103,500
Total.		\$359,700

About 90 per cent of the sales were made on the first call. The men took orders for wiring and fixtures too, which were referred to the office.





Eureka's Marvelous

Eureka's shipments increased from 104,172 cleaners in 1920, to 228,470 in 1923—an increase of 124,298 cleaners. The com-

A Graphic Record of Eureka's Remarkable Growth

Total Sales of Combined Competitive "Makes" 919,995

Total Sales of 69 Competitive "Makes" 796,530

Sales <u>Loss</u> by 69 competitive Makes in three year period-123,465 Sales <u>Gain</u> by Eureka in three year period-124,298 or-119%

In 1920, one Eureka was sold to each 8.8 sales made by all competitive makes

In 1923, one Eureka was sold to each 3.5 sales made by 69 competitve makes



Rise to Leadership

bined shipments of all competitive "makes" decreased from 919,995 cleaners in 1920 to 796,530 in 1923—a net loss of 123,465 cleaners.

The phenomenal rise of Eureka to leadership in the electric cleaner industry is clearly substantiated by the comparative shipments of 1920 and 1923. Yet even more can be said.

To further emphasize the dominating position held by the Eureka, we point out that during 1923, only two of the sixtynine competitive "makes" enjoyed sales in excess of 90,000 cleaners. Only one showed sales in excess of 125,000 cleaners. That 228,470 Eurekas were shipped from the factory during the year, consequently forces but one impressive conclusion.

Even more interesting is the fact that Eureka's 1923 shipments exceeded those of 1922 by 81,430 cleaners. This increase alone exceeded the total year's shipments of any one of sixty-five of the other sixty-nine competitive "makes."

Statistics show that during 1920 one Eureka was sold to every 8.8 sales of the combined competitive "makes." In 1923, the combined sixty-nine competitive "makes" were able to sell only 3.5 cleaners to each Eureka. The meaning is unmistakable.

This analysis should prove that a clearly-defined preference for the Eureka exists among prospective electric cleaner buyers;—that the Eureka meets and satisfies the requirements of the most exacting; and that the Eureka must be a real moneymaker for the authorized retail dealer.

Our District Sales Manager in charge of your territory will be pleased to analyze your problems for you and help you to an immediate increase in your electric cleaner sales. Write the factory for an appointment.

EUREKA VACUUM CLEANER CO., DETROIT, U. S. A.

Makers of Electric Vacuum Cleaners since 1909 Canadian Factory, Kitchener, Ont.; Foreign Brunch, 8 Fisher Street, Holborn, London, W. C. 1, England

E A A THE Dirt

Electrical Merchandising Pictorial, May, 1924

LURÉKA

Match these ~ if you

Sound Design and Construction! Check the Sunnysuds with any other electric washer regardless of price. Know what a remarkably simple and reliable mechanism it is. Think of this—Only fourteen moving parts; No lubricating needed; Enclosed gears—no belts, chains or springs; No wooden parts; Light, sturdy, compact and silent; Good for a lifetime.

A Remarkable Price! Practically all of the other widely known electric washers are 20% or more higher in price than the Sunnysuds. Yet the Sunnysuds embodies combined advantages which no competitor offers. Its value is even more obvious than its very moderate price.

Minimum Service Expense! The Sunnysuds continues to be a greater and greater sales success, because it is an outstanding mechanical success. There's nothing about it to tinker with or get out of order. It holds up. One man is able to do all the service work required at the factory on the more than 50,000 machines now in use. Sunnysuds dealers keep their profits.

Liberal Discount! We believe it costs less to keep dealers satisfied and prosperous than to be perpetually looking for new ones. There's a phenomenally low turnover in the Sunnysuds dealer organization—and a steady, substantial increase in their numbers—because they make money. Our dealers get the extra percentage which their satisfaction and loyalty save us in sales expense.

Factory Sales Help That Actually HELPS! Sunnysuds dealers don't have to submit either to preaching or prodding. Sunnysuds sales plans and methods are judged solely in the light of whether they'll really help make more sales and more profits. On that basis, twelve hundred dealers assure you of their success. You can get the interesting details for a post card request.

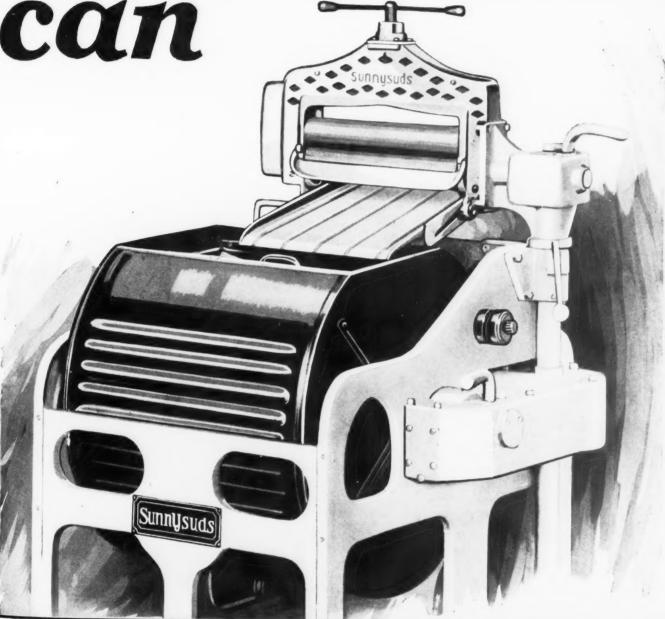
SUNNY LINE APPLIANCES, INC.

DETROIT, MICHIGAN

Factory Sales Branch - Mansfield, Ohio Canadian Factory - Kitchener, Ontario Export Dept. - 149 Broadway, New York

SUMMEN

advantages can



SIIIIS Electric Washer & Washer & Winger

Electrical Merchandising Pictorial, May, 1924

How C. C. Bohn Keeps "Merchandising" Working for Him

Sales of appliances and fixtures to store visitors are made easier with the aid of Electrical Merchandising and The Home Electrical, copies of which are kept on the counter for reference.

One number of *Electrical Merchandising* is always on hand on Mr. Bohn's own desk. Another number is placed beside the store telephone for ready reference. A third number is kept out on the counter, so that customers may get suggestions on what they want to buy. And a fourth number is passed around among the clerks to read at home. Mr. Bohn's store is located on Sixth Avenue near Forty-sixth Street, New York City, in a neighborhood which he as served electrically for thirty years.

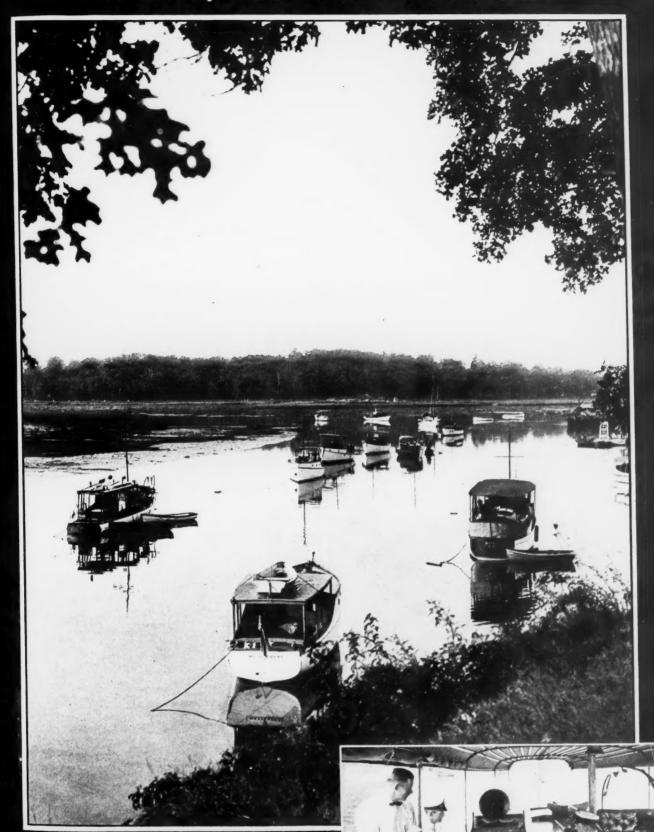


In their spare moments the clerks are often seen in the rear of the store reading a copy of *Electrical Merchandising*. Mr. Bohn believes that his clerks will be more valuable if they keep up on the latest developments in merchandising.



Electrical Merchandising Pictorial

A Monthly Picture Section of Sales Ideas



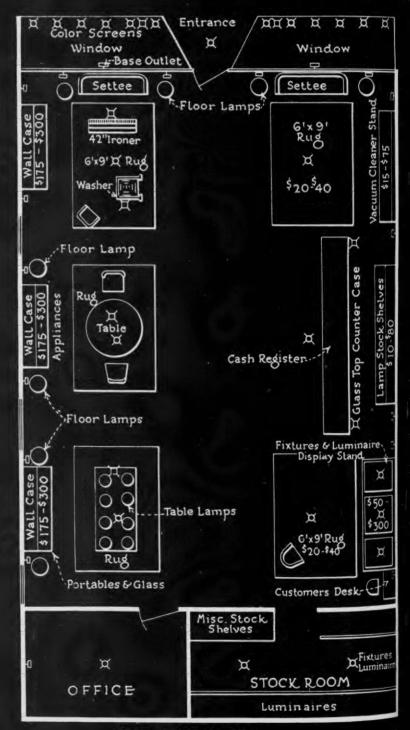
The Motor Boat Field Is a Summer Market for Electrical Accessories, Electrical Supplies, and Radio

of the Bohn up on

Study the complete list of the motor boat fan's electrical needs, on the page opposite

Five Layouts for the Retail E

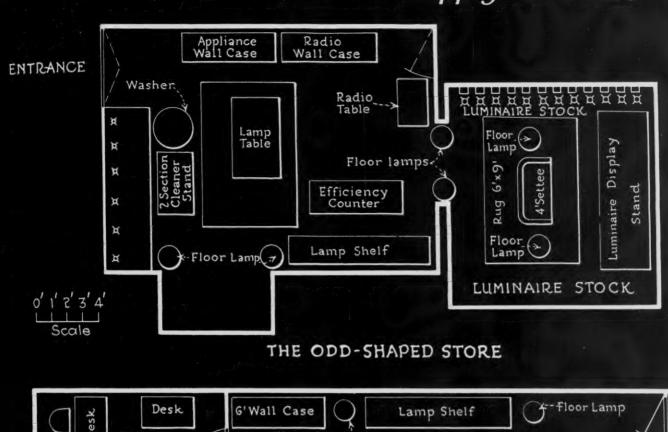
HERE are five representative plans for store arrangement, chosen for presentation to the readers of Electrical Merchandising, out of some 89 plans and layouts of actual store interiors by Robert E. Ely of the merchandising service division, Westinghouse Lamp Company, New York City. Exemplifying the points brought out in Mr. Ely's article on store arrangement on a preceding page, these designs have been planned to provide the most effective displays and greatest possible store convenience, at the lowest possible expenditure. Price ranges at which certain of the store equipment indicated is obtainable, appear on the plans.

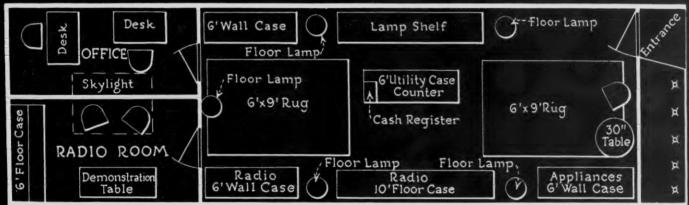


EN

THE WIDE STORE

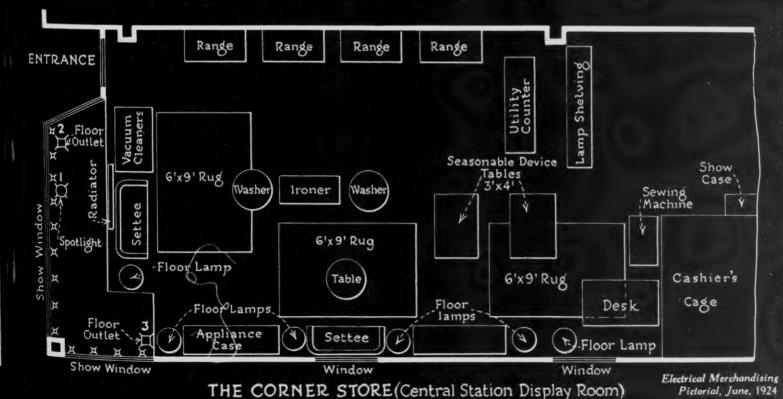
ail Electrical Store—One Should Apply to Yours





THE SMALL NARROW STORE

Lamp Stock Shelves



60,000,000 will appear in national magazines this year ~~

Together with use of newspapers, billboards, window displays, direct mail campaigns, etc., give Eureka dealers the advantage of the most impressive advertising being done for any electric appliance.

If you sell Eureka vacuum cleaners, you are benefitting from the most powerful advertising now being done for any electric appliance.

Since the first of this year (June included) more than thirty million Eureka messages have gone out through leading National magazines.

\$200,000 in Two Months

During April and May, alone, more than \$200,000 was expended for dominant Eureka National advertising; for smashing bill-board displays in 154 cities with a combined population of thirty million people; for newspaper advertisements the country over; and for a tremendous quantity of direct mail material and effective dealer helps.

The remainder of 1924 will witness an even more powerful program. Millions of magazine ads; thousands of billboard displays; countless newspaper advertisements; booklets, circulars, window streamers, displays, stickers, etc.

More Advertising Brings Bigger Business

Higher sales records have consistently followed the enlarged Eureka advertising program. Eureka dealers are now profiting by the largest volume of sales in the history of electric vacuum cleaner selling.

This campaign is placing Eureka even more dominantly before the great mass of buyers, and making Eureka supremacy more evident than ever. And it will either work for you, or against you—but for you, if you like.

There is a place and a welcome in the Eureka organization for live dealers. If you look forward to a steady, permanent increase in your vacuum cleaner business, an early appointment with our sales manager for your territory can be arranged on receipt of your wire or letter to the factory.

EUREKA VACUUM CLEANER CO., DETROIT, U. S. A.

Makers of Electric Vacuum Cleaners since 1909 Canadian Factory, Kitchener, Ont.; Foreign Branch, 8 Fisher Street, Holborn, London, W. C. 1, England



Eureka Ads-



EKA

(135)

It Gets the Dirt

Electrical Merchandising Pictorial, June, 1924

Buyers are more Sunnysuds

A hundred thousand people would buy Sunnysuds washers this year—if such a demand could be satisfied.

But the twelve hundred fine dealers we now have are not enough to cover nearly all of the localities in which buyers are asking for the Sunnysuds.

We need, and want, twenty-four hundred dealers.

Facts and figures tell us that in hundreds of communities there are many times that number of buyers who need, and want, Sunnysuds washers.



asking for dealers

The twelve hundred additional dealers who join us soon are going to get a proposition that will open their eyes, and fill their pocket-books.

After that number is secured, the door is again closed until our production is once more able to equal the demand.

Don't pass up this chance. It is open now. It may not be later, if your competitor appreciates a real opportunity more than you do.

SUNNY LINE APPLIANCES, INC. DETROIT, MICHIGAN

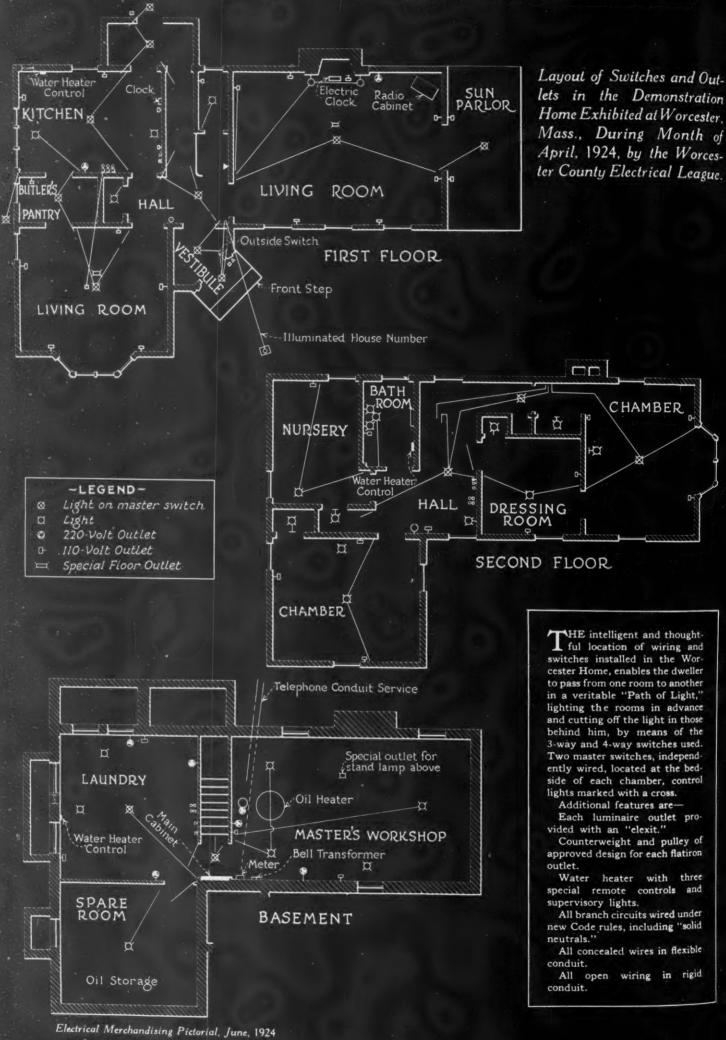
Factory Sales Branch - Mansfield, Ohio Canadian Factory - Kitchener, Ontario Export Dept. - 149 Broadway, New York

(64)



SIICS Electric Washer & Wringer

Wiring Plans of a Complete Home Electrical



Electrical Merchandising Pictorial

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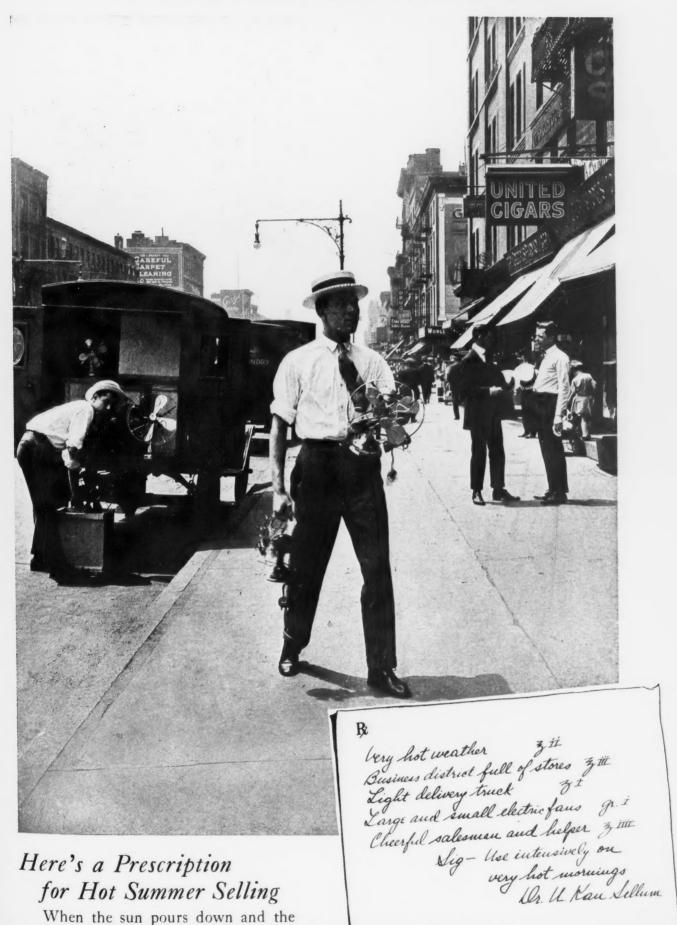
xible

rigid

heat boils up from the pavement,

that's when they need 'em most—Roll up your sleeves and go at 'em

A Monthly Picture Section of Sales Ideas



U. KAN SELLUM, M.D.

ELECTRICITY Continues to Play Its

Automatic Money Changing Machine insert Money Here 10 25 50 At the instant fares band

Changing Big Ones Into Little Ones

Following in the wake of the electric turnstiles recently installed in the New York subways is the electric change-making machine, which automatically makes change of coins larger than the necessary 5-cent piece used in the turnstile slots. Underneath each coin slot is a glass which magnifies and illuminates the money three times its normal size, thus helping to discourage fraud.

Floodlighting Philly's Bandits in Flight

Flight shooting with light with escaping bandits as the targets is a serious out-door sport originated by General Smedley D. Butler, director of Public Safety, Philadelphia, Pa

of Public Safety, Philadelphia, Pa.
At the left is shown one of the huge searchlights installed there to illuminate the main thoroughfares in case of emergencies, especially during bandit chases. Below at left is shown General Butler helping place one of the "spot-lights" in position. It lights the way to law and order, says the General.



Pedestrian Signals for London

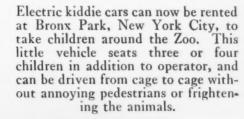
Traffic beacons have been installed on the Mall. London, to help reduce jaywalking and the ever-increasing accident list. On one side of the signal is a red light to warn vehicular traffic, and on the other is a white light indicating a cross-over for pedestrians.

Star Rôle in Everything That's New

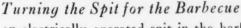


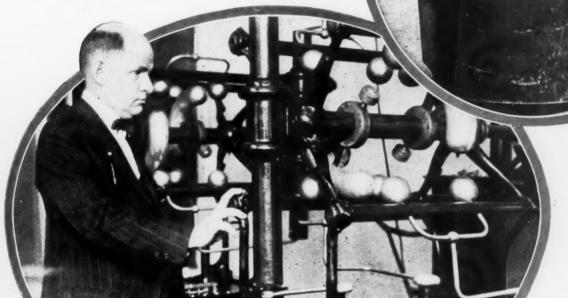
m : 1 College D 1

Here is an electrically operated spit in the barbecue of an enterprising sandwich man of Cincinnati.



Another "Off-Peak" Customer





King of X-ray Apparatus

The new X-ray machine at the Garfield Hospital in Washington, D.C., is said to be the largest of its kind in the world. Twelve years were required to develop it. Dr. E. A. Merritt is at the switch.

Radio in the Land of Kubla Khan

Radio is being used by the Asiatic Expedition of the American Museum of Natural History to keep in touch with the outside world while in the Mongolian desert. Bayard Colgate, in charge of the Expedition's Caravan is shown "tuning in" on Peking, China.



Cleaners and Cash SALESMEN

The Greatest Sales Contest in Electrical Appliance History Starts this month /

Hot weather has no chance to slow down Eureka sales—far from it!

Eureka salesmen everywhere are just swinging into action for the great Midsummer Sales Contest during July and August—a contest where every man and woman selling Eureka Vacuum Cleaners at retail has a chance to win and knows it.

To the 4,000 Eureka dealers, this record-smashing contest brings real summer sales volume. There can be

no let-down when the reward for effort is so great—and Eureka dealers profit accordingly.

Wiping the summer slump out of the sales calendar is just one of the things Eureka has done to help dealers to bigger and better electric cleaner business, and just one of many reasons for Eureka supremacy.

Our District Sales Manager will be glad to show you what Eureka offers you. Write the factory for an appointment.



Let's get down to Brass Tacks

on today's washing machine merchandising

If you watch costs to sell and service was hers you know the increasing expense and effort required to show even a fair profit in today's keenly competitive market.

If you're satisfied with present profits—keep to old methods and old products. But if you're not satisfied, investigate Savage now. No other washer brings you so many sales making features—no other so fortifies you against competition.

Compare the following sales making factors against the inducements you now have to offer your customers. Then decide.

Savage is the washer to sell because it is the machine your customers will buy. And they will buy—

- Because it has no wringer. It is safest for the operator and for the wash.
- Because it washes everything—not only the weekly wash but blankets, cotton-stuffed comforters, portieres, draperies, even feather pillows with the feathers in them.
- Because you need never touch your hands to the water—no more red, swollen wash-day hands.
- Because it washes, rinses, blues and dries in one tub—additional tubs are unnecessary.
- Because soaking and oiling of white clothes are unnecessary, with the Savage.
- 6 Because a scalding hot rinse is possible with Savage. It rinses mechanically.

SAMAGE

Because Savage never breaks buttons, smashes or flattens fasteners or hooksand-eyes.

8 Because it practically eliminates afterwash-day mending and repairing.

Because Savage is the safest, simplest machine to use—no levers, arms or pedals—one simple switch-button controls all washing and drying operations.

Because it means no laborious stooping, straining or lifting.

Because it leaves no deep, hard wringer-creases to be later ironed out.

Because it requires oiling only once every two to three years. Oiling is automatic.

Because it is unnecessary to lift out, remove or replace any parts in washing or drying.

Because it is so good looking. Wash anywhere in the house. Its top makes a good table.

Because it is so easy to keep clean and bright. Sanitary rust-proof construction.

Because it is so light—so easy to move around—so quiet in operation.

Because it has no reversing, swinging, swaying or plunging mechanism.

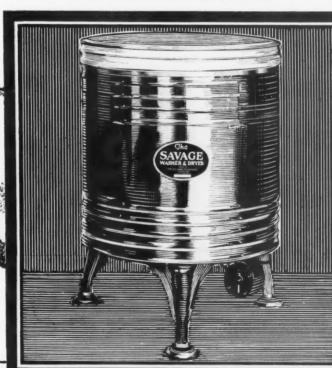
Because it lasts longer. Savage has no operating springs, no wringer-rolls to be renewed and replaced.

Because it has a double-bottom, a quick-acting drain and other distinctive construction features found in no other washer.

Because it is tested and approved by Good Housekeeping, Tribune (N. Y.) Institutes, Modern Priscilla Proving Plant, Today's Housewife Testing Home and leading authorities.

Because it is built and guaranteed by the makers of the world's finest firearms, the Savage Arms Corporation, Utica, N. Y.

THE WASHER FOR TODAY'S COMPETITIVE SELLING



"A Demonstration Is a Revelation!"

WASHER EDRYER

THIS COUPON BRINGS YOU THE SAVAGE STORY
—GET IT OFF NOW

SAVAGE ARMS CORPORATION, UTICA, N. Y.

Name

City State

Address

EM July

This Portrait of George E. Miller of Cleveland

Was Transmitted by Wire from Cleveland to New York for "Electrical Merchandising"

OR the last twelve years the executive direction of electrical development in Cleveland has been in the hands of George E. Miller, sales manager of the Illuminating company, during which period Cleveland has become one of the most intensively developed cities, electrically, in the country.

Possessing excellent judgment and tact, Mr. Miller has functioned in an advisory and co-operative capacity, but in effect he has been placed in the position of an active sales manager for the local electrical family. He was the first president of the Cleveland Electrical League and has devoted much of his time and energy through these years to planning and making possible the broad advancement of the electrical idea in Cleveland and the development of a greater

Electrical League and has devoted much of his time and energy through these years to planning and making possible the broad advancement of the electrical idea in Cleveland and the development of a greater prosperity for the electrical business there. Problems of market development early appealed to Mr. Miller, and in 1899 he became sales engineer in the St. Louis office of the Westinghouse company. A year later he was transferred to the Westinghouse headquarters at Pittsburgh, and for a period of seven years he engaged in sales work and confidential activities for the vice-president.

of seven years he engaged in sales work and confidential activities for the vice-president. He was assigned to the Cleveland district office in July, 1907. This brought him into close contact with the fascinating opportunities for market building that lie in the field of co-operation between the central-station company and the local electrical family of any community. He decided four years later to enter utility commercial work and joined the Cleveland Electric Illuminating Company, where he has won for himself a national reputation as one of the foremost lighting-company sales managers of the day.







THE above picture of Mr. Miller was transmitted for Electrical Merchandising over the wire from Cleveland to New York City, a distance of 571 miles, in four minutes. The apparatus used represents the association of many recent inventions with standard types of telephone and telegraph apparatus readapted to this new purpose. Its development was brought about by the division of development and research of the American Telephone & Telegraph Company, assisted by engineers of the Western Electric Company.

In the special transmitting mechanism

In the special transmitting mechanism two cylinders are revolved in unison, one at the sending end, the other at the receiving end. A light-sensitive cell is fed across the original picture at the sending end, and controls a "light valve" which reproduces on the sensitive receiving film the lights and shades of the original portrait. The picture at left shows the receiving apparatus consisting of (left to right) control and amplifier panel, synchronous motor, and lamp. Behind the lamp is the light valve, adjusting telescope, and revolving drum with film.

an lift ov

Electrical Merchandising Pictorial

A Monthly Picture Section of Sales Ideas



Last Call for Fan Profits

Two Ideas to Help Clear Out the End-of-Summer Stock

Above: This table, in a Memphis, Tenn., store, is built 43 inches high and wired with sixteen double outlets. At this height the customer gets the breeze nearer to his face, and at the same time he is able to examine the fan without lifting it or stooping over.

Below: The clever dealer has tagged all his merchandise not only with the price but with the low cost of operation. With all the merchandise accessible and all the selling information on the tag, the customer is her own best salesman.



"Sell the Eye and You Open the Customer's F

One of the show places of Baltimore—the appliance salesroom and lighting studios of the Consolidated Gas, Electric Light and Power Company.



Above: Turn to the right from the elevator and this spacious entrance room to the lighting studios invites you in. Here the more expensive table and floor lamps are displayed. From this entrance room or rotunda the smaller fixture display rooms open. This room makes the first impression.

Left: A corner of the lighting studios. It is sound selling psychology to group lamps and fixtures with fine pieces of furniture and to display them before handsome tapestries and wall hangings. The luxurious background increases the value of the merchandise.

Below: The six windows are a continual and changing electrical exposition. This window is a striking example of how electrical merchandist that is to be found in every dealer's shop can be combined into an attention-getting, sales-producing display which is certain to entice customers.

mai

tom



Electrical Merchandising Pictorial, August, 1924

r's Pocketbook"—Baltimore's Merchandising Maxim



One of the eleven rooms of the lighting studios which surround the rotunda. Each of these rooms is paneled, draped and furnished to provide the best possible background for the types of fixture displayed. The entire space covered by the lighting studios is approximately 9,200 sq.ft.

Showing the merchandise is but one element in this merchandising success. Sales policies of even more importance are discussed by the merchandise manager of the company in pages 4487 to 4490 of this issue.

Above: Here on the main floor of the company's 22-story building is the appliance sales room. Table lamps are used to add to the attractiveness of the polished metal table appliances in the show cases. This display with the cleaners and washers shown is in the path of greatest traffic on the way to elevators and cashier and stops many a passing customer. Well-displayed is half sold.

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n-getting play which customers

Below: A show-case for silk shades in the rotunda of the lighting studios, which provides the most prominent display, together with the best protection for this easily damaged stock.



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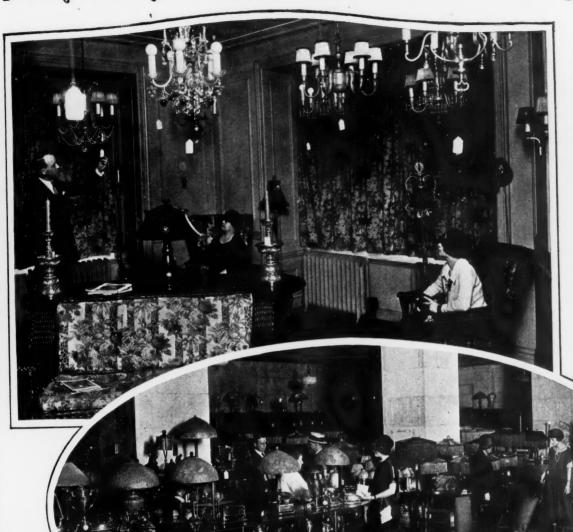
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Electrical Merchandising Pictorial, August, 1924

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\$262,600
WORTH OF
EUREKA
VACUUM CLEANERS
Sold in
Grand Rapids
Michigan

The Grand Prize EUR





A Salesman with Authority

HE men who call on manufacturers for the Domestic Electric Company are more than salesmen. All of them are either officials or substantial stockholders in our organization. They are men who have authority to say YES. They are men who know motors from shaft to shell. Each and every one is either an engineer or a man educated by years of practical work. You can talk with these men as you would to our Chief Engineer or General Manager. They "know their stuff"; they know the appliance manufacturing business and can intelligently discuss your motor applications.

THE DOMESTIC ELECTRIC COMPANY CLEVELAND . OHIO

Cometic Electric Motora



Electricity at the Michigan State Fair

Making an
Electrical Exhibit
Talk in Terms of
Home Conveniences

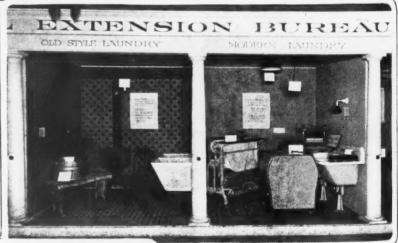




Above—Large-appliance section of "Electrical Building" at the Michigan State Fair last year. This complete building was taken over by the Electrical Extension Bureau of Detroit, which rented the space to dealers, jobbers, and manufacturers, who were required to decorate their booths to harmonize with the general scheme.

Left—The first of a series of booths erected by the Electrical Extension Bureau of Detroit to emphasize the contrasts between the old style home and the new style home in which electricity plays a major part. The first booth portrayed an old style and a modern dining room.

Right—In one day alone 138,000 persons viewed this booth, which effectively displayed modern laborsavers for the laundry. "Every woman is entitled to a laundry like this one," read a sign. "She should demand it. Here electricity has solved the wash-day problem." In the booth portraying an old style laundry, a sign read, "Some women needlessly continue to work under conditions like these. Compare this old-fashioned home laundry with the modern room adjoining."





Left—After seeing these kitchens, many women who attended the fair took advantage of the bureau's suggestion, "Let Us Help You Plan. Our Service Is Free." A sign in the old-fashioned kitchen read, "Avoid Kitchens Like This," and a sign in the modern kitchen, "When You Build, Buy, or Rent, Insist Upon Having Your Kitchen Like This One." The equipment included electric dish washer, electric refrigerator, range, ventilating fan, electric clock, iron, mixing unit, and up-to-date lighting fixtures.

Electrical Merchandising Pictorial, August, 1924

Electrical Merchandising Pictorial

A Monthly Picture Section of Sales Ideas



To Focus the Customer's Attention on the Merchandise Offered—

These fixture booths with their heavy velour drapes are employed in the Solar Lighting Company's salesroom at Los Angeles. "The side panels are finished in a French gray," explains F. C. Balfour, manager, "and to get variation in the back drapes we have used two colors of velour; a very dark blue, and a very dark maroon red. The two colors of drapes are mixed so that two booths may have red, the next booth blue, possibly the next one or two red, and then again blue. This gives a variation which is very pleasing to the critical eye. All fixtures in the booths are hung on elexits, which makes it a very rapid and simple matter to change fixtures."

Under each booth is a double-door cabinet in which are stocked additional fixtures of the same type as the one which hangs in the booth overhead. If a prospective customer likes some parts of a fixture and does not like other parts, the salesman can, with the assistance of a rubber-tired ladder, quickly take down the fixture hung in the booth and replace it with another similar, but slightly different, taken from the cabinet underneath. Each of the two salesrooms has a total of ten booths on each side, making, with the central fixtures, a total of twenty-two fixtures to each room. The fixtures are segregated by finishes, i.e., one row shows all silver-crystal fixtures, another all gold fixtures, another all candle and drop fixtures, another all silver candle and drop fixtures, and so on.



Turning Crowds Into Cash—Demonstration



Located in the center of Cincinnati's best shopping district, surrounded by the leading department stores and shops catering to women, is The Electric Shop, the merchandising division of the Union Gas & Electric Company. Seasonal merchandise is right up near the entrance and out on tables to be seen, examined and bought.

On the right hand side is one of the producers of store traffic: the silverware department. As a display this merchandise goes well with the polished metal electric appliances opposite and the Cincinnati shopper has learned that she may be the loser if she buys silver or flat ware without first seeing what The Electric Shop offers.

Thousands of people are brought into the store every month to pay gas and electric service bills. And here directly opposite the "line," skilled demonstrators continually show the advantages of the electric refrigerator, range, ironer and washer.

Standing in line to pay bills is always tedious and the attention and interest are easily attracted. What more natural then, after the bill is paid, than for Mr. or Mrs. Interested Consumer to stop and ask the demonstrator for more information. The plan is so successful a sales method that 90 per cent of major appliance sales are now made as a direct result of store demonstration.



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compined in I ton a town merco. The these those cation attra per i and

ation pers.

and Display in The Electric Shop, Cincinnati

This is only one half of the lamp department which occupies an entire floor. Table lamps and shades are shown here in such variety and values that this department is lamp headquarters in Cincinnati. The fine tapestries, vases and marble ornaments that are shown here and elsewhere through the store add to the decorations, attract shoppers, and sell at a profit.

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Altho the company has complete branch stores in Newport, Covington and other outlying towns served, the numerous sales made at The Electric Shop to these customers from those towns is an indication of the powerful attraction for the shopper in large assortment and striking display.





At this special demonstrating booth there is a continuous daily demonstration of the smaller cooking appliances. This booth is situated at the "neck of the bottle." No one can pay a bill, take the elevator or stairs to an upper floor without passing it. And because of the tempting things that are always being baked and steamed and toasted and percolated here, nobody wants to pass without stopping.

Electric appliances are not bought for ornaments. They are bought for what they will do. And so at The Electric Shop they are demonstrated as well as displayed.

How Louisville Fixture Dealer Utilizes Former Bank Quarters



The Burdorf Company of Louisville, Ky., now occupies a building which formerly housed a bank. In the above picture, the space railed in with white and green marble once used by the bank's cashier, now accommodates Mr. Burdorf's bookkeeping and clerical department. In the rear of this space, to the left of the picture, fixture display rooms

now follow the lines of the onetime tellers' cages. These cages have been solidly roofed over and provide a mezzanine floor for the display of hearth furniture and mantels.

ture and mantels.

A room on the second floor (shown below) displays living-room fixtures and portables.

At the left is shown the commercial-lighting display room.



An Appliance Exposition on the Manager's Wall

Advertising pages from Electrical Merchandising, grouped for easy comparison on the office walls, provide the Huber Builders' Material Co., Cincinnati, Ohio, Cincinnati, Unio, with a concentrated survey of major electrical appliances. When Harry A. Huber (at the right in both pictures), president and general manager, deeral manager, cided to push complete line of major appliances, this was his problem: he could personally investigate the appli-ance field, which was new to him, yet the appliances selected must maintain Huber leadership and to delegate the decision meant to increase the risk on the investment of many thousands of dollars.



The answer was found by Howard D. Nugent, (at the left in both pictures) appliance manager. Electrical Merchandising appliance advertising, spread on two walls, concentrated the entire appliance industry. The busy president could thus easily become familiar with this field and make the important choice himself. And it was from the study of this "exposition on the wall" that a washer, cleaner and irroner were selected and, after test, adopted by this large and well-known company. Mr. Nugent is still finding a use for his display. His new salesmen are using it to get acquainted with the appliance field.



Electrical Merchandising Pictorial, September, 1924



Grand Prize EUR
VACUUM



Presto! Chango! Electric Billboards Play Mystic Tricks

Electricity furnishes funny pranks with highway signs—A flicker of light and you see right through the front of a bank—a click of a switch and "Vassar Chocolates" turns into "Cake Eater Candy Bars."



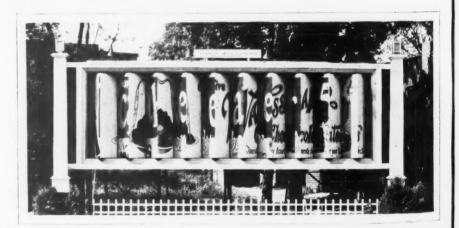
SOUTH TEXAS COMMERCIAL NATIONAL EARK

Seeing Right through a Bank

The above billboard pictures the front of the South Texas Commercial National Bank at Houston, Texas. With the exception of the columns which are of non-transparent material, the outside front view of the bank is painted on window screen, and when lighted from the front, presents an opaque picture. A flasher operates the light, and when the front lights go off and the back ones on, the interior view of the bank shown left appears. This view is the solid surface of the billboard itself. The sign was built by the Texas Advertising Company.

A Billboard with Three Faces

A highway sign with three distinct faces, each as effective as the others, has been developed and placed in use by the Triangle Sign Company of Kansas City, Mo. The sign is composed of a series of identical triangular shaped metal drums with sheet metal faces on which are painted sections of a complete display. The drums are revolved in unison from one display face to another by a small automatic mechanism, the process of the change being shown at the right. The sign, stationary every five seconds, is shown in two aspects below.







Electrical Merchandising Pictorial, September, 1924

Electrical Merchandising Pictorial

A Monthly Picture Section of Sales Ideas

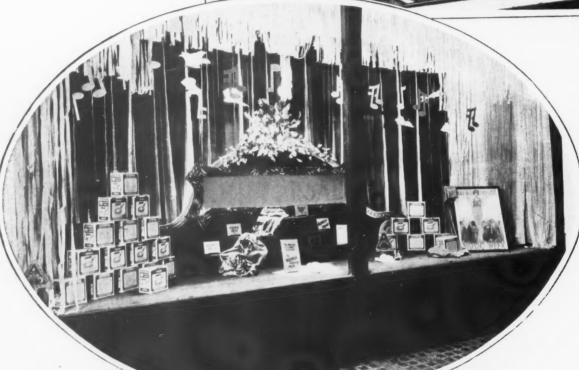


But the electrical man who has his territory well analyzed, his prospect lists in shape, and his preferred prospects marked for initial attack—sees clearly the market at which he is shooting and can concentrate his efforts on cases. He and his organization are the ones who are today getting results and building sales volume at lowest sales expense.

Seven Window Displays That Win Attentional

Besides winning first prize in a manufacturer's window display contest, The Good Housekeeping Shop of Detroit, Mich., should feel mighty proud of the fact that its display, shown at the right, was competing with windows trimmed by department store experts, whose time is entirely devoted to display work. Four vacuum cleaners constitute the entire electrical equipment, nevertheless the unique tie-up of a well-known make of cleaner with the enthroning of the king of labor-savers makes it the outstanding display of hundreds submitted in the contest.





An example of enterprise in using every sales possibility was demonstrated by the dealer whose window, shown at the left, was tied up with Music Week. The featured appliances, electric irons, awkward in size and appearance, are ordinarily difficult to display. This successful trim has an atmosphere for a background which is dominating and timely in character. Note the cut-out music notes on window



A complete electrically lighted bungalow, with small window boxes, front lawn and small electric fountain which attracted attention to the possibilities of electrically pumped water for the home, gave atmosphere to the window of A. R. Parsons, Porterville, Calif. The display had unusual interest and was much commented upon as an effective and attractive way of displaying an intricate piece of machinery, ordinarily regarded as unsuited to window display purposes.

Electrical Merchandising Pictorial, October, 1924

tigand Sales from Passers-by—Can You Beat 'Em?



People of taste and means who buy fixtures, portables and appliances of the character sold by the Shepherd-Rust Electric Company, Wilkes-Barre, Pa., are attracted by this beautiful display. The gift merchandise, which gives character and attractiveness to the window, not only brings people into the store but it is in itself a profitable line which sells steadily the year round. A number of show cases in the store are given up to this merchandise and glassware and pottery add to the attractiveness of the tables displaying portable lamps. Vases such as are shown in the window are sold for portables and carry with them the sale of adapters and shades.

The United Appliance Company, Jackson, Mich., put on a "fight" in its window, (as shown at right) with a prize ring and all the necessary props as a background. "Kid Drudgery"—impersonated by a dilapidated broom—is down and out, while over him stands the "Battling Cleaner." The details are complete, even to pails, towels and sponges in the corners of the fighters.

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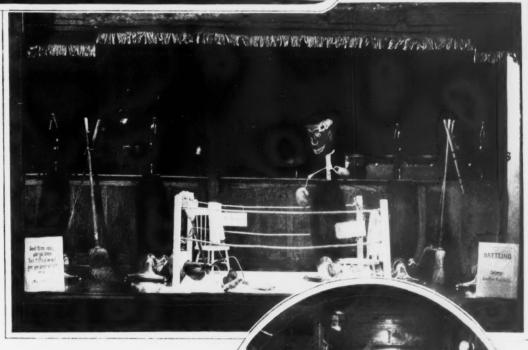
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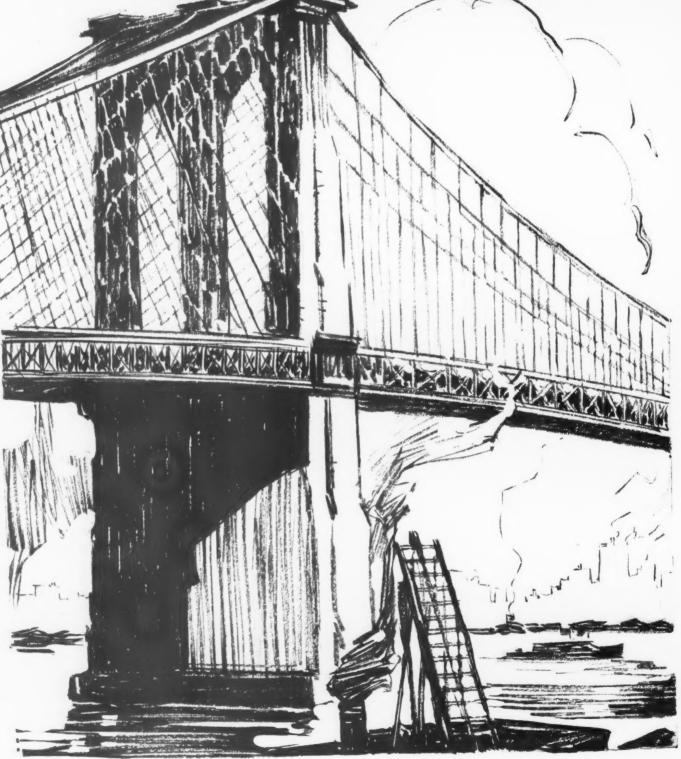
inating characcut-out vindow The general interest of the public in cartoons, combined with the always dependable lure of motion was used by the Utah Power and Light Company in a most effective window display. A large personified dollar sign cut out of cardboard occupies one-half the window and the washing machine itself the other half. Each is furnished with an appropriate caption.





A dominating center of interest pulled the window of the Eureka Electric Company, Eureka, Cal., out of the commonplace. Simplicity is the keynote, still the details suggest human interest that wins smiles and sales from passers-by.

26°C000



Electrical Merchandising, Pictorial, October, 1924



New Lighting Equipment We've Noticed



Above—The sky's the limit for the New York advertiser. Billboard frontage is so scarce along Broadway that airplanes carrying electric signs strapped underneath are now used to fly over the city at night. This flyer fell in the river and lost his wings, lumens and everything.

Right—Traffic signs made of frosted glass and illuminated with electric bulbs are being installed on all corners in New York's congested area. One of the new bronze traffic towers is seen in the background.

Below—Liberty's light is electric. A close-up of the torch on the Statue of Liberty discloses the source of the friendly light which shines in New York harbor.



Electrical Merchandising Pictorial, October, 1924

"It's 'close force elect "Wh tome up he ing that sider mone s' 'talk her h this sugges in ter

"Th telep 1,00 mak Here be a elect a ca will shop

Electrical Merchandising Pictorial

A Monthly Picture Section of Sales Ideas

"It's the best little 'closer' on my sales force," says an Ohio electrical dealer. "When my customer can't make up her mind in buying an appliance that means a considerable outlay of money, and she tells me she must first 'talk it over with her husband,' I take this as my cue and suggest that she get his decision right now, over the 'phone. Many sales have been clinched by getting the other interested party on the wire."





Three Business-Building Ways to

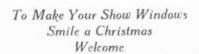
Use the Telephone in Your Christmas Selling

"This store is never closed to the telephone — call Rittenhouse 1,000," reads a sign in Wanamaker's Philadelphia window. Here is a service feature that can be adapted as a slogan by any electrical appliance dealer. Such a card in a well-lighted window will take care of calls of evening shoppers and makes practically every such incoming call a sale.

Have a telephone canvass made by members of the store staff during morning hours when business is slack. Pick prospects in good residential districts. Have salesperson speak briefly and to the point, explaining goods and price, and inviting the customer in for a demonstration. The women called will thank you for 'phoning them!



Christmas Trims That Bid the Prospec En



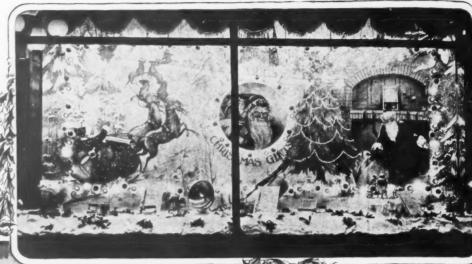
Use well-lettered cards to tell the practical value of each gift.

Keep the glass well-lighted and clean, inside and outside.

Don't use displays longer than one week.

Link up the trims with your advertising.

And be sure that they reflect the holiday spirit.





Above—With a glittering background suggestive of the festive spirit of Santa Claus, the window of the St. Joseph Light, Heat and Power Company, St. Joseph, Mo., halted the passers-by with the message that every article in the store is suitable as a Christmas gift.

Left—To turn the thoughts of Christmas Club members toward the purchase of electrical appliances with their December checks, the Hartford (Conn.) Electric Light Company used this huge check as a background.

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Below—Santa Claus drives right into the window of the Hemmert Electric Shop, Piqua, Ohio, and deposits the gifts. The "snow-fall" effect is made by tying tufts of cotton on black threads and suspending against the glass.

Right—An electric train window will stop the grown-ups, too! While not every dealer will want to build so elaborate a railway terminal as a background, it is possible, with little effort, to have the toy trains run around the appliances.



ec Enter to Find Out What's Inside



Where to Get Assistance in Trimming Christmas Windows

Read pages 4688 and 4689 of this issue of "Electrical Merchandising."

Write the Society for Electrical Development, New York City, who can supply you with Santa Claus cut-outs, Christmas backgrounds, wreaths, etc.

Use the wealth of "dealer help" material supplied by manufacturers, much of which is distributed through your local jobber. See pages 4727-4729 of this issue.

Above—Dressing up the Christmas window does not necessarily mean overcrowding with holly wreaths, red bells, festoons, trees, etc. This window, which features table cookery and lamps, typifies simplicity in props and orderly grouping, and is representative of the best practice in department store trimming.

Santa

with

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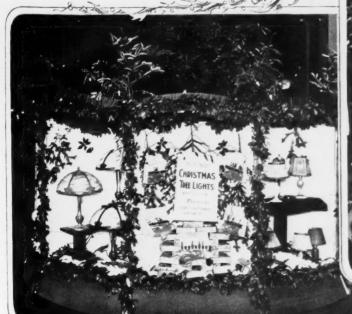
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with tford used

Right—Little wads of cotton and three Christmas cards envelop the three major household appliances in a holiday atmosphere. The cotton wisps are glued on the glass, simulating snowfall. On dark days high-intensity illumination will add to the effectiveness of such a setting.

Below—Christmas crowds passing the Fitchburg (Mass.) Gas and Electric Company stopped to gaze at the revolving platform divided into compartments, each compartment displaying a different type of appliance or lamp. This was a store exhibit as well as a window novelty, and attracted much favorable comment.

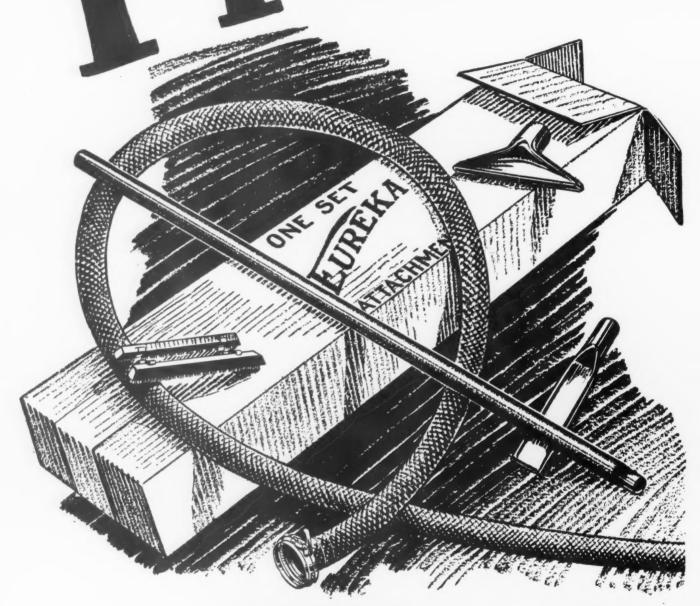






Electrical Merchandising Pictorial, November, 1924

Free Set



The Grand Prize

Electrical Merchandising Pictorial, November, 1924

VACUUM

Fureka Attachments | Free to Eureka Purchasers Free to Eureka Dealers | Between Nov. 1st and Christmas

This is unquestionably the greatest educational drive in Eureka history—if not the greatest the entire electrical appliance industry has ever seen.

The Eureka Vacuum Cleaner Company has determined, regardless of cost, to teach American women the tremendous usefulness of the Grand Prize Eureka when used with its famous attachments.

From November 1st to December 24th, inclusive, a complete set of these great attachments, retailing everywhere for \$8.50, will be supplied FREE with each Grand Prize Eureka purchased by dealers direct from the factory or any of its authorized territory distributors. The retail dealer will, in turn, give the at-

tachments FREE to customers purchasing Eurekas between the dates set.

To properly support this sensational educational campaign, approximately \$210,000 will be expended by the Eureka Vacuum Cleaner Company and its authorized dealers during November and December. Never before has the electrical cleaner industry witnessed a nationwide sales drive on so tremendous a scale, or one more certain of overwhelming success.

If you want this kind of backing for your own vacuum cleaner sales, lose no time in getting in touch with the Eureka Sales Manager for your territory. Wire or write the factory for an appointment.

\$210,000 in Advertising this great Educational Offer

\$75,000 for National Magazine Advertising

60,000 for Newspaper Space

50,000 for Billboard Displays

25,000 for Direct Mail Material

EUREKA VACUUM CLEANER CO., DETROIT, U. S. A.

Makers of Electric Vacuum Cleaners since 1909 Canadian Factory, Kitchener, Ont.; Foreign Branch 8 Fisher Street, Holborn, London, W. C. 1, England

(150)



Tried and proved loud speakers

Housed in Cabinets of Rare Beauty

Timmons Type A (Adjustable) Talker. Price, \$35. Beautiful handrubbed mahogany finish, bronzegold screen and Gothic scroll grill. (Three-fourths actual height.)



TIMMONS

Electrical Merchandising Pictorial, November, 1924

of unsurpassed tone quality!

—These are Timmons Talkers—pioneers of the cabinet type loud speakers embodying the Timmons reflected tone principle.

S

At the very beginning of radio, we felt that eventually all loud speakers would be put into cabinets, just as phonograph horns are now concealed. Who today would think of buying a phonograph with an outside horn?

However, concealing the horn in the beautiful cabinets of Timmons Talkers has not called for any sacrifice of tone or volume. On the contrary, musical critics and tone authorities have told us that Timmons Talkers reproduce fuller, rounder and more mellow tones than any loud speaker they have ever heard. These same authorities have also stressed the naturalness of tones reproduced by Timmons Talkers.

Everyone who hears and sees Timmons Talkers

appreciates their beauty and wonderful reproducing quality. There are two types—Adjustable, as shown on the left hand page, and Non-Adjustable, shown on the right hand page. Each has a rich hand-rubbed mahogany finish. The Gothic scroll grill on the Adjustable Type is backed by a gold-bronzed screen. The Non-Adjustable Type has a silky screen backing the grill. List prices are \$35 and \$18.

Remember that in demonstrating Timmons Talkers in radio stores located in central sections of cities, that sets are bound to pick up stray electrical currents from trolley lines, generators, motors and so forth. Inferior speakers, because they are not so sensitive, do not reproduce these stray bits of electrical energy, but at the same time neither do they reproduce the fine musical shading which is heard from Timmons Talkers with their extremely faithful reproduction.

The B-Liminator Which Takes the Place of "B" Batteries

Thousands of these B-Liminators are now in use on all types of sets. They give a wonderfully smooth and noiseless "B" current right from the light socket of any alternating current, 110 volt, 60 cycle circuit. Patented May 15, 1923.

The B-Liminator has taps for both detector and amplifier tubes—16 to 45 volts on detector tap and up to 135 volts on amplifier tap.

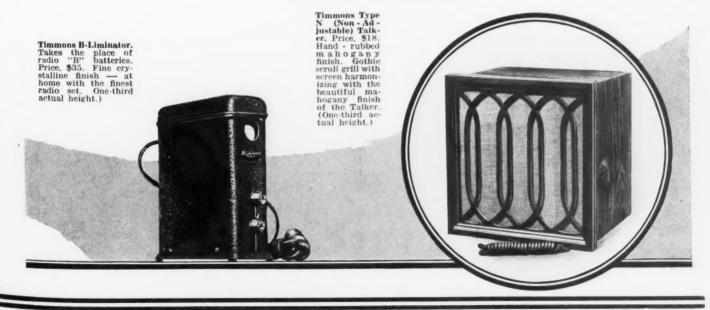
All in-between voltages can be controlled, even to the fractional part of a volt. Price \$35.

So absolutely sure are we that the B-Liminator will operate perfectly on any set that dealers are authorized to return the buyer's money if the B-Liminator, after all instructions are followed and when properly tuned, fails to operate to the buyer's fullest satisfaction. Timmons Tested Radio Products are fully guaranteed by the makers and are sold only by responsible radio dealers.

We are now in the midst of a big advertising campaign. The Saturday Evening Post, radio publications and newspapers in principal radio centers are being used. We also have window cards and counter displays; also folders and a full dealer plan of co-operation. Write us for details

TIMMONS RADIO PRODUCTS CORP.

Germantown, Philadelphia, Pa.



Radio Products

The Journeyman Will Soon Know All

With this new x-ray he looks through walls and locates concealed wires and pipes

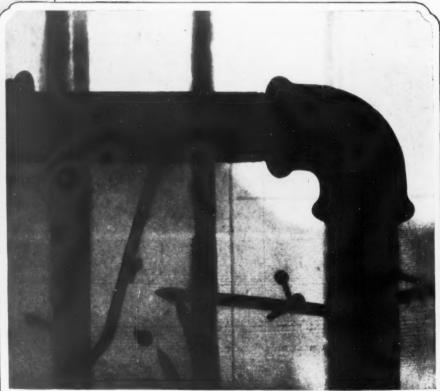


Weighing only twenty pounds and taking up no more space than a camera, the portable x-ray outfit just developed by Dr. W. D. Coolidge of the General Electric Company, is the newest recruit to lamp-socket devices. On account of its compactness, light weight and freedom from high-voltage hazards this portable x-ray opens up many

new applications. For example, with it a journeyman or plumber can locate pipes, conduits, wires, etc., concealed in walls and partitions by simply looking through the wall as pictured above. Any pipes, conduit, wires or nails inside the wall will then show up as in the shadowgraph below. This will make matters much easier.



The entire x-ray apparatus can be carried in one hand, its dimensions being only 6 in. x 10 in. x 8 in. The tube operates at 10 milliamperes and a maximum of 56,000 volts, developed by a self-contained transformer.



Electrical Merchandising Pictorial, November, 1924

Electrical Merchandising Pictorial

A Monthly Picture Section of Sales Ideas



2 Check over the stock on your shelves and in your stock-room. Make sure you have the goods your customers will want. Get the things you lack.

 $\mathbf{3}$ Go over your prices. If necessary, re-mark your goods so that the prices will help you sell.

4 Select your extra salespeople with care. Train them and all your force to give the same personal service the boss would give.

Four things to do during December

—the month that is the merchant's opportunity

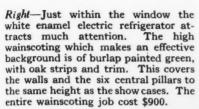
A Little Journey Thru Chicago's Latest and



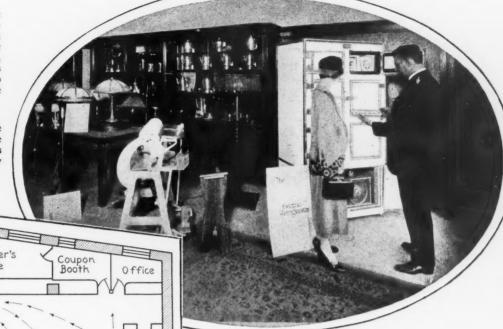
Electrical Merchandising Pictorial, December, 1924

and Finest Electric Shop

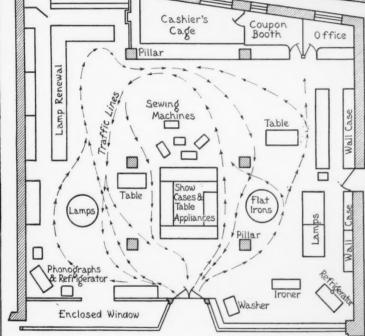
The New Broadway Store of the Commonwealth Edison Company



The diagram belows hows how the store plan routes the people past attractive merchandise displays and obtains maximum sales results from heavy store traffic.



Below—These show cases eight feet long were built to order and cost \$320 each—\$40 a foot. The cashiers' cages and partition seen in the rear cost also \$40 a running foot.



Below—The lamp renewal department is a chief creator of store the other cases in the store and traffic. The glass show cases becox \$40 per foot.







The Home of "Electrical Merchandising," New York, and Its New Lighting Equipment
Giving 15 to 50 Ft.Candles

The compliment at the top of page has been paid to the McGraw-Hill Building by illuminating engineers, after surveying the new high-intensity lighting system just completed. In both office and plant where Electrical Merchandising, Electrical World, Electrical Retailing, and twelve other magazines are published, intensities from 15 foot-candles to 30 foot-candles have been obtained.

Left—A night view of electrical publishing headquarters—the 13-story McGraw-H.ll Building situated at Tenth Avenue and Thirty-sixth Street, New York City. The building rises nine floors above surrounding structures, and owing to its blaze of light by night, and its white tile walls by day, is visible for miles in every direction.

Below—The entire tenth floor is occupied by printing presses, there being two rows of sixteen presses each. Standard dome R L M reflectors are installed at a height of twelve feet from the floor and equipped with 300-watt or 500-watt, bowl-frosted and Mazda C lamps.



Above—The composing room on the eleventh floor has both a localized and a general lighting installation with intensities reaching 19 foot-candles. The general lighting alone gives an intensity of 9 foot-candles.

Right—In the bindery, which occupies the entire first floor, very little close vision is required. Nevertheless, the prismatic-glass, mill-type units, fitted with 300-watt lamps give an intensity of 14 foot-candles.

Lighted Building in the World!"



used in the stenographic office.

Above, right—In the drafting room, evenness of illumination is secured by diffusing discs.

Right—The circulation department is equipped with luminaires providing a wider spread of light.

Below—The twelfth floor, showing the editorial and business offices of Electrical Merchandising. This great 100m, with a ceiling height of twenty-three feet is equipped with six special giant luminaires. Each luminaire consists of a 42-in. bowl holding three mirrored 1,500-watt reflectors.



Electrical Merchandising Pictorial, December, 1924



GREAT FEATURES OF THIS EPOCHALFREE ATTACHMENTS! The

complete \$8.50 set of famous Eureka Attachments FREE to DRIVE ~~~ purchasers of Grand Prize November 1st until Christmas.

\$210,000.00 IN ADVERTISING! Being spent by the Eureka Vacuum Cleaner Company and its authorized dealers to insure the success of this amazingly generous offer.



It is already evident that the sales of authorized Eureka dealers during this special Christmas campaign will exceed \$3,300,000.00 representing more than 70,000 Eureka Vacuum Cleaners

A merchandising drive destined, we believe, to eclipse both in magnitude and productiveness anything of a similar nature ever witnessed by the electrical appliance industry is now being conducted by Eureka dealers throughout the nation.

An Unparalleled Selling Opportunity

Large retailers—and smaller ones as well—will recognize in this tremendously effective Free Attachment Campaign one of the fundamental, underlying principles of good merchandising. It is a sales plan which enables the retail dealer to do a record volume of business from newspaper advertis-

ing alone. It is a clean-cut opportunity to create sales without excessive selling overhead.

An Immediate Decision Will Bring You Immediate Results

There is still time for additional dealers of good standing to profit from the opportunity for recordsmashing vacuum cleaner sales that the Free Attachment drive offers. Regardless of what other make you may handle, you should be able to at least double your business between now and Christmas by taking on Eureka NOW. Decide immediately—wire the factory for an appointment with our sales manager for your territory.

EUREKA VACUUM CLEANER Co., DETROIT, U.S.A.

Makers of Electric Vucuum Cleaners since 1909 Canadian Factory, Kitchener, Ont; Foreign Branch, 8 Fisher Street, Holborn, London, W. C. 1, England



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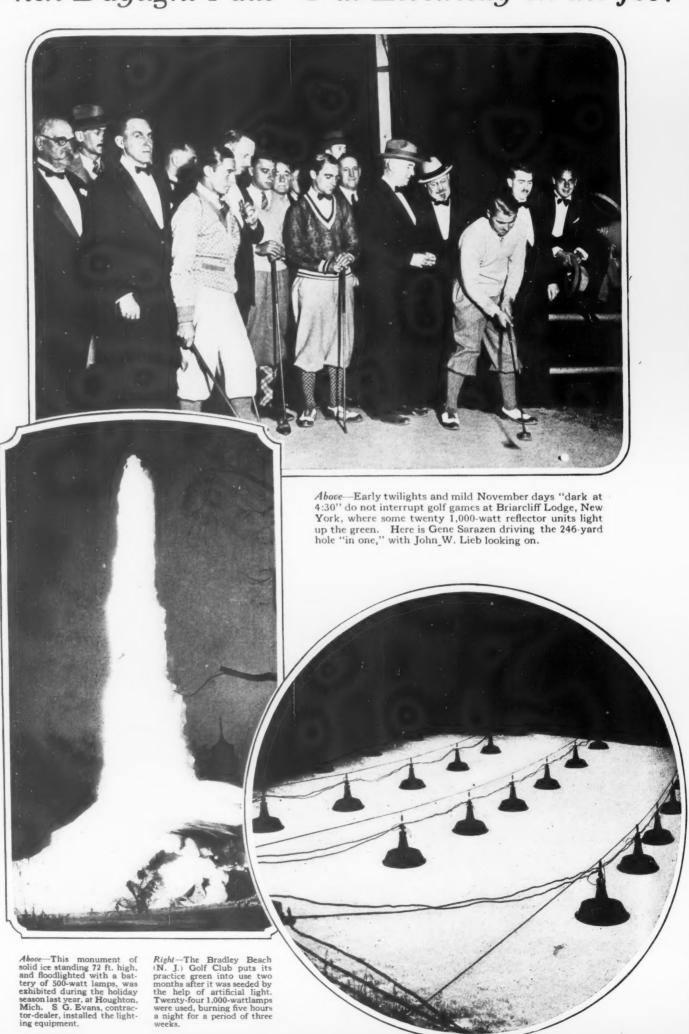
OVER \$175,000.00 being spent by the Eureka Vacuum Cleaner Company alone in smashing doubles in color and single pages in national magazines, powerful advertisements in great newspapers, dominant billboard displays and special direct mail help.

4

SPECIAL LOW DOWN PAY-MENT and easy terms! Only \$4.75 down and exceptionally convenient payments, in effect during this drive, complete an offer no woman can resist. 5

THE GIFT SHE WILL APPRE-CIATE! A great Christmas appeal to husbands and fathers, carried into millions of homes by advertising that gets ACTION.

When Daylight Fails—Put Electricity on the Job!



Electrical Merchandising Pictorial, December, 1924

It's all in the X-Ray Reflector



No. 4801 The popular type of metal-bowl indirect lighting unit. Cream finish. Comes ready-to-wire and install.

Be Confort

All units shown here are individually packed in compact cartons. Easy to stock, ship, handle and SELL.

No. 5801

Metal fittings finished in Monumental Bronze. X-Ray Reflector seats in lip of glass bowl making unit dust proof. Opal glass with gloss finish. Ready-to-wire and install.

The Curtis Adapter gives double value to floor and table lamps. Reflector makes it possible to light room and retain artistic value of lamp. Great demand means fast turnover. Complete as shown.

To make your line complete, stock these

Be prepared, at all times, to show something different in interior lighting. Stock these popular types of Curtis Indirect Luminaires. Besides selling unique lighting units at a profit you build up a reputation that grows and that brings lighting business your way.

Ready stock means immediate delivery on the job. Quick delivery of Curtis Luminaires (using X-Ray Reflectors) means a doubly satisfied customer. Satisfied with the lighting and with you!

X-Ray Scoopette No. S-200

Offers most effective method of show case display. Packed complete with all fittings in standard package.



No. 2900 Adapter

Fits any candle fixture with standard socket. Includes X-Ray Reflector, holder, shade frame and 50-watt clear, "mill-type" lamp.

Be a Specialist!

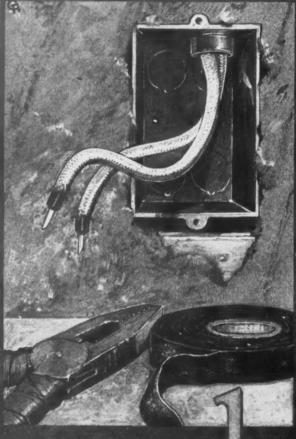
Learn to specialize on high grade equipment that establishes a reputation and brings you a steady business increase. Ask for the cooperation of our experienced engineering and designing departments.

CURTIS LIGHTING, Inc.

1139 W. Jackson Blvd. **CHICAGO**

31 W. 46th St. New York

Merchants National Bank Bldg. Los Angeles



Rome Code Wire means

- uniformly, well tinned copper for easy soldering,
 tough, live, free stripping rubber insulation,
 tight, clean braid that cuts cleanly and does not slip,
 a smooth wax, with no lumps, that makes fishing easy ing easy.

A uniformly good wire

An eighteen acre unit controlled plant insures uniform quality and real service

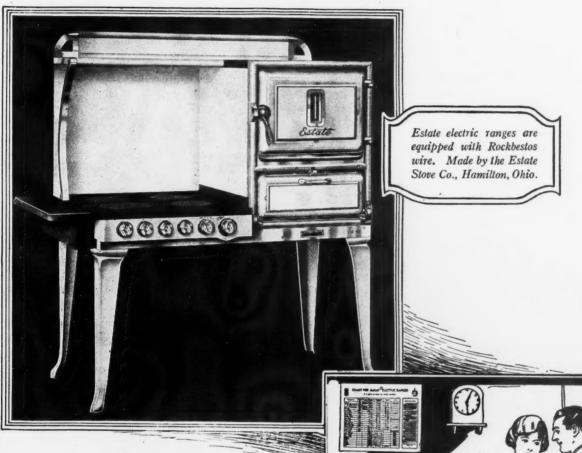
ROME WIRE COMPANY Mills and Executive Offices: ROME, N. Y.

Diamond Mills, BUFFALO, N. Y.

NEW YORK BOSTON CHICAGO CLEVELAND DETROIT
50 Church St. Little Bldg. 14 E. Jackson Blvd. 1200 W. Ninth St.
LOS ANGELES I. G. Pomerov. 336 Azusa Street

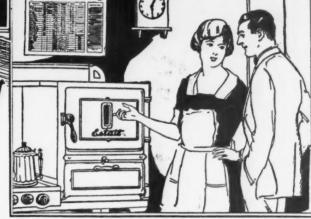
ROCKBESTOS

-the asbestos covered wire



Cook with Electricity

The modern way—the clean and efficient way is to cook with electricity, and all good electric ranges are fitted with Rockbestos stove wire since the important thing is to deliver the energy continuously without breaking down. This Rockbestos does better than any other wire,



Samples of any of our asbestos covered wire on request.



ROCKBESTOS PRODUCTS C O R P O R A T I O N

5942 Grand Central Term. Bldg., New York

NEW HAVEN, CONN.

711 First Nat. Bank Bldg., Chicago



The "Super-Marvel" is the

most widely sold and the most widely imitated violet ray made.

It was the first set with 3 electrodes

ever to sell for \$12.50, and no competition has ever been able to match its big value or its nationwide success.

A 3 electrode complete violet ray outfit, in a handsome silk-lined carrying case!

\$1250

Sturdy in construction.

Dependable in service.

Beautiful in design.

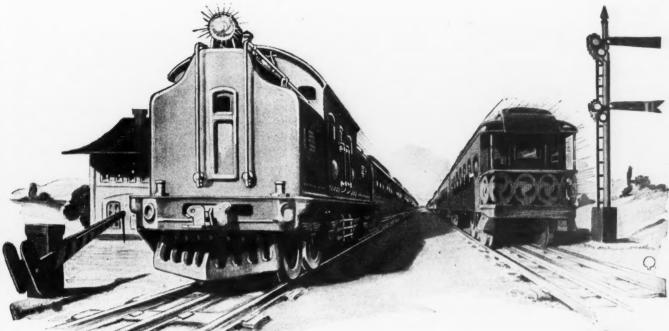
Light in weight.

EASTERN LABORATORIES

Super-Marvel No. 3

225 - 229 EAST 38 1 STREET

NEW YORK CITY



Order Now— Be Sure to Have an Adequate Holiday Stock of Lionel Trains

NEVER before have sales of Lionel Trains and Model Railroad Accessories been so great. If you have not yet placed your order, do so at once. We can still supply you.

Stocks of Lionel Trains, Multivolt Transformers and Accessories are ready for *immediate delivery—and Prices are Lowest in Lionel History*.

Lionel Products have been "Standard of the World" since 1900. They are electrically and mechanically perfect—true models of real trains. They meet the boys' ideas of what miniature railroads should be. That's why they outsell every other line. There's still time to order your holiday stock.

Send your order to your Lionel Distributor or direct to us now. Write today for Catalog and Trade Price Sheet.

The LIONEL CORPORATION

Entire Sixth Floor

48-52 East 21st Street, New York City

Western Coast Representative:
M. Sweyd, 180 New Montgomery Street, San Francisco, California



Lionel Automatic Train Control

The Biggest Selling Model Railroad Accessory Ever Produced

No display is complete without this wonderful newdevice. When train approaches, red light shows and train stops for any length of time (adjustable); then green light shows and train goes on—absolutely automatic, absolutely perfect in construction and operation.

Immediate Deliveries Order Liberally Now

LONEL ELECTRIC TRAINS

"MULTIVOLT" TRANSFORMERS



PROFITS TO JOBBERS AND DEALERS

WAIT! for **JANUARY**

> We are ready to announce our

Better Merchandising Plan

Backed by 15 years of Selling and Manufacturing Experience

Write for this Plan today



SMALLER STOCKS

LARGER **PROFITS**

10-in. Non-Oscillating A.C. 1-Speed

10-in. Oscillating Universal 3-Speed

14-in. Oscillating A.C. 3-Speed

14-in. Oscillating D.C. 3-Speed

Our Fans are as reliable as our Motors This is your guarantee of Quality

GALVIN ELECTRIC MANUFACTURING CO.

3320 So. Broadway, St. Louis, Mo.

Export Department: 149 Broadway, New York, N. Y.



A Series of Twelve Points of View-

Number Six



The Old Boy gets a surprise

for sure. Looks like a good place to thaw out. Right zippy tonight.

Well I'll be—it's an electric affair!

By golly, I thought nothing could ever come up to a real log fire, but look at those glowing logs and tell

"What ho!—say, this is cozy me where you've ever seen anything more natural in your life.

Some heat there, too!

I know a lot of fire places that never see a fire, and a lot of housewives who like grate fires, but complain about the muss they make.

Next year, believe me I'm going to bring some of these 'Glologs' along!"

We Ourselves Speak—

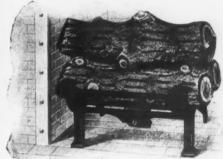
In a series of 12 viewpoints we are telling you the story of the "Glolog" from the "outside"—the way your customers, dealers, or jobbers look at it.

The rest is between ourselves!

We've tried and we've succeeded in producing an electric heater that meets an immediate popular demand. The market is practically unlimited, since nearly 99% of the homes and apartments built since the war have had fireplaces.

And that Glologs can be sold to this market has been amply proven by the remarkable success reported by progressive dealers and jobbers in leading cities, from one end of the country to the other.

to the other. The margin of profit on every Glolog sale is large—larger than you usually get on such appliances. The potential business in wiring and installation is larger still. Furthermore, there are real possibilities in the selling of complete Glolog installation for new apartments, homes and hotels in your territory.



And here's a summary of facts-

Nearly 99% of apartments and houses built since the war have fireplaces—all live pros-pects for GLOLOGS.

2. The margin of profit on GLOLOGS—is larger than on most other electrical appliances. 3. Installation and wiring earn substantial extra profits.

4. You can sell "big" to realty corporations and builders since wiring costs little during construction, and architects can figure a worthwhile saving by eliminating flues and heavy falsework.

5. The GLOLOG Merchandising Plan, with folders, literature and an unique miniature window display, has built up sales more than 400% in a year in one big city. It's waiting to help you.

G. There's no waiting for deliveries of GLOLOGS. Ample stocks are on hand at the factory and—jobbers throughout the country.

Write us so we can get down to facts and figures



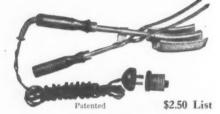
Strait & Richards, Inc.

Manufacturers

Fabyan Place and Selvage Street Newark, N. J.

Atlantic-Pacific Agencies Corp. Western Distributors Rialto Bldg., San Francisco





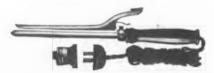
The Fast Selling New Marcell Waver

Thousands sold and giving entire satisfaction. Every woman wants one—and the price is very low. Gives a beautiful marcelle wave in five minutes. Nichrome element. Separable plug. Ebonized handles. High nickel finish. A fast seller for Ximas.



The "Feathewate"-\$1.50

Lightest weight curling fron made. Replaceable Nichrome element, Separable plug in handle. Silk cord. Removable clamp. Thousands will be sold for Xmas gifts this year.



The "Boudoir"-\$1.00

Quality, specifications and price is making the "Boudoir" the fastest selling—the most profitable—curling from in the world. Detachable clamp. Separable plug. Essily replaceable Nichrome element. %-in. barrel. Six feet cord.

Don't be caught at the last minute with bare shelves. Make every possible sale this Xmas. To help you get this business, we have made arrangements to ship all orders the same day received and by express. This assures you a good stock right up to the end of Xmas business.

And Gold Seal Appliances sell! There's no question about that. High quality at low prices appeal to the buyer. And Gold Seal Appliances are put up in attractive all-year-'round boxes—suitable for any season.

Thousands of these appliances have been sold and are giving perfect satisfaction. Thousands more will be sold this Xmas. Get your share. Mail or wire collect your order today.

THE GOLD SEAL ELECTRIC CO. 2110-12 Woodland Ave., CLEVELAND, OHIO

Export Department: 130 W. 42nd St., New York City

All Gold Seal Appliances Guaranteed 2 Years



"Ever Ready" Soldering Iron—\$1.00
Replaceable Chisel Style Tip. Replaceable Nichrome element. Six feet cord. A big radio seller



\$3 50 L Pat. Nov. 25, '24,

"Big Value" Toaster

Big Toaster sales thru the holidays? Double your sales with this Gold Seal toaster. Toasts evenly without burning. Nichrome element. Heavily nickeled. Ebonized feet and handle.



8-Cup—\$4.00 List 10-Cup— 4.50 List Serviceable!

Miles ahead of other percolators! Percolates in one minute. Handsomely finished. Good-looking and serviceable. Wherever shown both are smashing all percolator sales records.

Gold Seal Appliances

Easiest Selling - Most Profitable.

2084 Cleaners Sold



FLECTRIC SHOP

November 6, 1924.

Electric Vacuum Cleaner Co., Cleveland. Ohio.

Dear Mr. Tuteur:

It may interest you to know that during the compaign which featured your electric cleaner, and which ran from October 1st to October 21st, we sold 2084 cleaners.

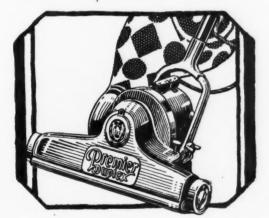
This male surpasses any cam-paign that we have ever run covering a like period of time.

It is self evident that a sale of this proportion speaks well for the quality of the merchandise.

very truly yours. THE PHILADELPHIA ELECTRIC CO.

Nanager-Appliance sales.

MWB/x



-in one month -in one city - by one company

The Philadelphia Electric Co. made a new record—selling in a single month 2084 cleaners! And the success of this sale they attribute to the outstanding qualities of the Premier Duplex.

It Sells Quickly—

Its double action, thorough performance, ball-bearing efficiency are known by women everywhere.

It Stays Sold—

Its sturdy build and ball-bearing motor mean a minimum of repair trouble. Each sale is a lead to more sales!

ELECTRIC VACUUM CLEANER Co., INC. CLEVELAND, OHIO

Distributed in Canada by the Premier Vacuum Cleaner Company; Ltd., Toronto and Winnipeg, and the Canadian General Electric Company; Ltd., General Offices, Toronto

Should the Life and the Earning Power of an Electric Motor be limited by its Bearings



Commutators wear but slowly. Brushes are easily and inexpensively replaced. What, then, makes motors "wear out?" What cuts down their efficiency and finally fails?

Motor windings seldom fail. Good insulations stand up.

"NVRMA" PRECISION BALL BEARINGS

Experience, alike of motor manufacturer and motor user, furnishes the answer—INADEQUATE, UNRELIABLE, SLEEVE TYPE BEARINGS.



Whatever of anti-friction quality a sleeve type bearing possesses, it has by virtue of the lubricant used and not because of any friction-reducing quality in the sleeve type bearing itself.

and HOFFMANN" PRECISION

The success or failure of such a bearing, then, depends upon its lubrication. Inadequate, or neglected, or improper lubrication means the failure of the sleeve type bearing and this means the failure of the motor.



The one and only complete solution of the motor bearings problem lies in the use of true anti-friction bearings-

ROLLER BEARINGS

Bearings which, though vastly improved in their operation by ample and proper lubrication, are yet not absolutely dependent upon the lubricant for their anti-friction qualities-



Bearings designed to provide, in their mountings, a store of lubricant ample for long periods of high-efficiency operation, without renewal or attention-

MAKE GOOD MOTORS BETTER

BALL BEARINGS, for motors of smaller power and higher speeds: ROLLER BEARINGS, for motors of larger powers and heavier duty.

The production cost, to the manufacturer, and the purchase price, to the buyer, may be a little higher for the ball or roller bearing motor.

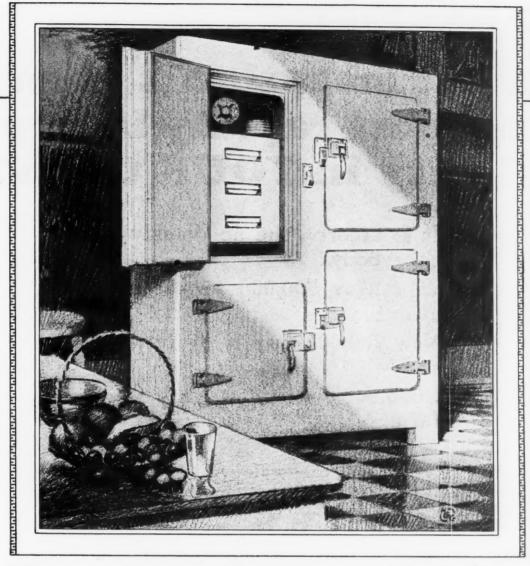
But this difference is far over-shadowed by the subsequent savings resulting—the saving in lubricant: the saving in current, the uninterrupted service, the lower up-keep, the longer life of sustained of high efficiency.

NORMA-HOFFMANN BEARINGS CORPORATION

Anable Avenue

Long Island City

PRECISION BALL, ROLLER AND THRUST BEARINGS



The One Biggest Feature of electric refrigeration

When you tell a buyer that any appliance will last for years, he naturally asks for proof.

There is only one kind of proof that proves, and Kelvinator alone offers that.

Kelvinator points to installations that have been efficiently doing their work for years. These installations are in practically every community and your statements can be verified by the prospect.

Find, if you can, any stronger selling feature than that of Kelvinator's past performance.

Kelvinator Corporation, 2039 West Fort Street, Detroit, Michigan Kelvinator of Canada, Ltd., 11 Temperance Street, Toronto

Kelvinator

The Oldest Domestic Electric Refrigeration

What magazine is growing most rapidly in popularity in YOUR town?

It is Liberty, the 5c Weekly for Everybody!

Last May 500,000 people paid cash for it—

Now 700,000 buy it every week and—

1,000,000 will be buying it in

You, as a merchant, can profit by Liberty's ever growing popularity because Liberty has become a powerful force for sales in your community.

Each week, in your town, Liberty's merchandising organization, of periodical wholesalers, newsstands and boy salesmen aggressively sell Liberty to the people who buy from you. They work for you by carrying to your customer advertisements of the things you sell.

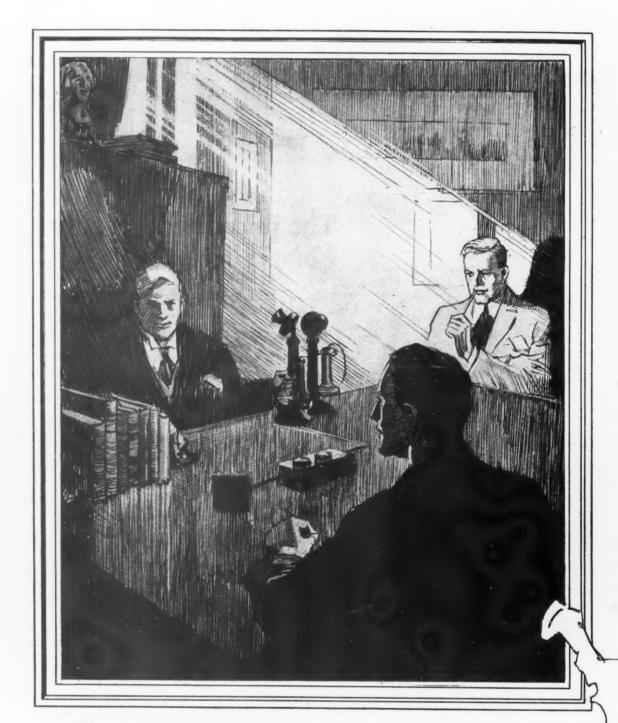
When a manufacturer advertises a commodity in Liberty that YOU handle, he is giving you the best LOCAL selling assistance possible.

Watch Liberty every week as your current index of what people want and a guide to what you can sell most profitably.

Liberty A Weekly for Everybody

Fiction · Articles · Advertising · News-Pictures · Fashions · Patterns · Sports





The Man who listens but says little

E SOMETIMES travels with salesmen for the Domestic Electric Company, but he never sells.

He "sits in" when Domestic Engineers are conferring with users of Domestic Motors regarding motor applications, but has little to say.

He attends all important meetings of the Domestic engineering department, but quietly listens.

Apparently he takes no active part in these deliberations, yet it is upon his shoulders that the accurate and economical production of Domestic Motors rests. He is the factory superintendent.

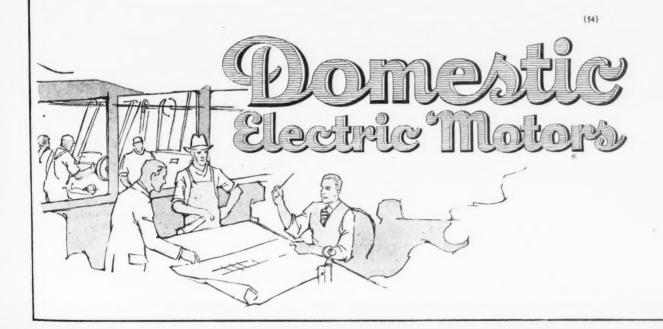
By being closely associated with every job from the start, he gets—first hand—the points that are incidental from an engineering standpoint but vital when it comes to manufacture. He outlines production while the engineers design the product.

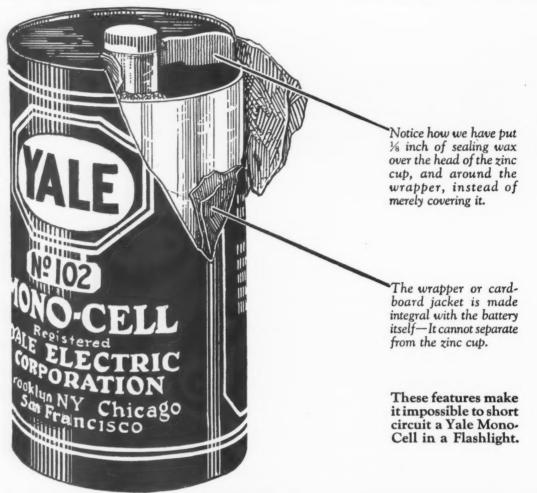
Find, if you can, any motor manufacturer with more

thorough departmental co-operation. It is such team-work that makes better motors without adding to their cost.



THE DOMESTIC ELECTRIC COMPANY, CLEVELAND, OHIO





YALE MONO-CELLS

FIT ALL STANDARD FLASHLIGHTS

YALE Mono-Cells are made by an organization of 30 years experience in the manufacture of Flashlights and Batteries—They are made of the finest materials obtainable and manufactured under a process supervised by experts—They do not leave the factory until they have passed the most rigid tests and inspection. They must do more than satisfy.

Dealers everywhere are now selling these better batteries and consumers are buying more of them.



WRITE us concerning the No. 100 display cabinet, which has proven to be such a help to dealers throughout the country.

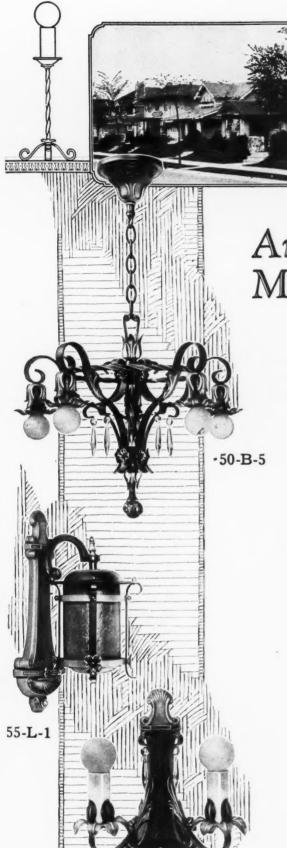
"CHOCK" FULL OF DARK DISPELLING ENERGY

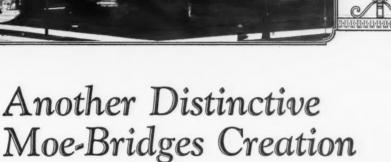
YALE ELECTRIC CORPORATION

CHICAGO

BROOKLYN

SAN FRANCISCO





The Black and Gold Line! It's new and distinctive. It gives you a wider Moe-Bridges assortment with which to meet your customer's needs.

Moe-Bridges Black and Gold fixtures possess all the richness and charm that has always distinguished its Wrought Iron Fixtures—plus the novelty of fresh creation. They are in perfect taste—but they make a different appeal.

They are finished in deep velvet black and antique gold with a touch of rich red here and there and amber tear drops to catch and reflect the light.

The Black and Gold Line (Series 50) includes close-fitting ceiling pieces, suspended fixtures, wall brackets, and lanterns. Also—torcheres and candlesticks that harmonize with the general lighting scheme.

Here is a new sales opening. New style — new finish—a wider choice for your customers—a more complete assortment for you. Prices are in proportion to our usual low figures. If you have not received your copy write NOW for new Beautifully Illustrated Catalog of our entire line.

MOE-BRIDGES COMPANY

EASTERN BRANCH 588-590 BROADWAY NEW YORK

FACTORY & HOME OFFICE 236-244 BROADWAY MILWAUKEE PACIFIC COAST BRANCE 933-935 MISSION ST SAN FRANCISCO

The Riddle

-a merchandising



The Riddle
Special Series is
packaged
throughout in
standard
individualized
cartons. (Smaller
fitments in pairs.)
Completely
merchandised
throughout, in
conformity with
standard Riddle
practice

The "Headliner" in the Riddle Special Series...5-light fitment (also in drop style) at \$16.50 retail, with dealer's full margin. Popularized with the public through Saturday Evening Post advertising S Light
Living or Dining Room
fitment

ST 50

Retail

Aggressive dealers in the residential lighting field have never known a selling opportunity such as offered by the Riddle Special Series

Special Series achievement of outstanding importance in home lighting equipment

The climax of the effort of The Edward N. Riddle Company to market residential lighting fitments of recognized standard quality at prices to reach the volume field has been achieved in the Riddle Special Series.

Backed by the established Riddle name, popularized through the investment of hundreds of thousands of dollars in national advertising, the Riddle Special Series has found an immediate welcome from home owners and home builders.

Production of the Special Series is establishing new records in the manufacture of residential lighting fitments. The public has recognized the unusual opportunity afforded for securing home lighting equipment of standard Riddle quality at a lower price than ever thought possible before the introduction of the Special Series.

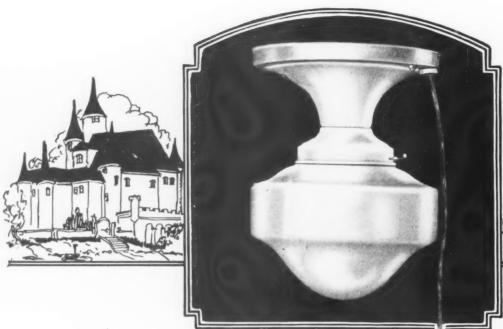
The field for dealers has been immeasurably widened and selling opportunities vastly enlarged at a single stroke.

Available to all Authorized Riddle Dealers

The Riddle Special Series is available to all Authorized Riddle Dealers. To dealers not authorized the opportunity is afforded of securing Riddle representation with a minimum investment. Write at once for full information regarding possibilities for securing the Special Series under the Riddle Dealer Authorization Plan.

THE EDWARD N. RIDDLE COMPANY, TOLEDO, OHIO
Makers of residential lighting fitments since 1892







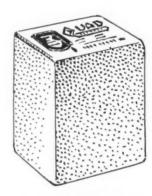
Makes every kitchen a new profit producer

AFTER you sell Mrs. Jones a Quad Kitchen Unit all the neighbors will want one, sales will come thick and fast — not because Mrs. Jones sets the style, but because most women appreciate good light in the kitchen and they know the difference between porcelain and paint. The Quad unit is real porcelain enamel that never turns yellow.

But the thing that takes the neighbors' eye is the dandy Plug-in-Switch that controls the light and has an outlet for the electric iron or toaster. It hangs just overhead in the center of the room — always "alive" and mighty handy.

Priced exceptionally low to the trade — order a sample.

QUADRANGLE MFG. Co.
553 W. Monroe Street
CHICAGO



Each quad unit now comes in an individual carton, wired complete, with glassware, (holders without glass 12 in a carton.) Why bother to assemble a substitute? Our carton idea means economy. Easy to handle, easy to stock, ready in a minute.





Crossing the Bridge of Sales

If you could carry your fixtures across the threshold of more than a million homes and tell your story to their owners and prospective owners, you would have little difficulty in selling them, of course. They could see your wares, discuss them, choose designs and place their orders. It would be like crossing a bridge from your factory to the very presence of those who need your merchandise.

Thousands of women, home-makers of the nation, write for counsel to Good Housekeeping's Department of Furnishings and Decorations. They accept its advice. They show decided preferences for trademarked commodities of all kinds. Your goods identified by a trademark will be more than acceptable to our readers. They will be sought and bought by them. Good Housekeeping is a first-rate bridge of sales that leads straight to American homes. Now is a good time to discuss the matter of increased selling turnover. Shall we send a representative?

GOOD HOUSEKEEPING

119 West 40th Street

New York City

More Than a Million Readers More Than a Million Buyers

D



Get ready for your biggest Christmas with McLean Showcases

WHY not make this Christmas the most profitable in your history by installing McLean Store Fixtures?

People who enter your store around Christmas are in a buying mood—all you require is the right kind of a suggestion to effect a sale. McLean Units allow you to place hundreds of gift suggestions squarely before your customer's eyes. McLean Showcases make profitable customers out of men and women who come in to purchase a socket, a lamp, or some other unprofitable article.

McLean Units are built of genuine birch, richly finished. The No. 615 Display Case pictured above is equipped throughout with plate glass and has mirror back doors in the rear. This Unit forms an ideal setting for electrical appliances and supplies, radio goods, etc.

Low prices and easy terms place McLean Units within the reach of every progressive dealer. Our new catalog gives complete information. It is brimful of splendid sales ideas too. Send for your free copy today.

W. B. McLEAN MANUFACTURING COMPANY

Pittsburgh, Pa.



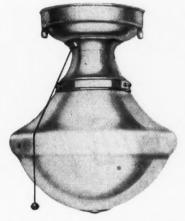
"Merchandising Methods and Equipment" is more than a catalog. It is a valuable book founded on the experience of men who have made big money in retailing. It is worth dollars to every dealer. Send for your free copy today.

MCLEAN

3049 Bigelow Boulevard

A GLASS SHADE

For Every Room in the HOUSE



DUQUESNE KITCHEN LUMIN-AIRE—sheds clear, glareless, welldiffused rays through snowy-white Cora glass. All filaments are concealed.

One of the fortunate circumstances that surround the selling of Consolidated Lamps is that no matter in what portion of the house your customer requires better lighting—in the kitchen or milady's boudoir—there is a style and a type especially designed for that purpose.

The decorated shades of the Consolidated line are all hand painted. Their craftsmanship is unexcelled. Consolidated Lamps sell rapidly. Their turnovers are swift and sure.

By displaying any one style of the Consolidated line, you align yourself with the Lighting Educational Committee of the campaign for eyesight conservation. "Better Home Lighting" is the slogan for this campaign—and better home lighting is made possible by a Consolidated.



CONSOLIDATED PORTABLE—for living room, library or hallway. One of the most popular styles of the Consolidated line. All shades are handsomely hand painted.



SHOWER LIGHTS—for the main lighting fixtures of dining room. Comes in various styles and types. Style 2227-ET 471 illustrated, and is Golden Oak in color.



BRACKET SHADE—for wall brackets in living room, bed-room, dining room or hallway. Style 1748-948 illustrated.



BED ROOM SHADE—receding flange at bottom affords properly shaded light without reducing efficiency. Style 2401-939 illustrated.



BED ROOM LUMINAIRE—decorated—used by many for bed-rooms. Hand painted in various exquisitely executed designs.

Consolidated Lamp & Glass Company

Coraopolis, Penna.

New York

Boston

Los Angeles

Chicago

Portland

London, Ont.

Sumpin Jer /

that this firm has passed its 35th anniversary signifying 35 years of eminently satisfactory service to the industry, it has been decided by us that something really magnanimous should be done in the nature of a suitable recompense for your thoughtful consideration and many kindnesses. So after weeks and weeks of careful deliberation, constant haranguing backwards and forwards, and meticulously proing and conning the subject, a weighty decision has finally been arrived at, and at last we can announce the incessant argumentation stilled.

We propose to furnish this industry with the greatest boon to humanity announced thus far in this country. An act of magnificent kindness which will make our name go ringing down the corridors of Time as perhaps the greatest benefactors of mankind in history.

IT furnishes us great pleasure to be able to publish in this noteworthy journal of our beloved industry, the message that has taken us so long to prepare. And it is with a feeling of gratitude and kindness to all you wonderful friends who have helped us to our place in this field that we are about to give this award, of greater intrinsic value than any mere monetary consideration, more than filthy lucre, for it means kale in great slathers, far better than souvenirs, for it will make you remember us. It is better than anything else we could possibly give, and think! . . has taken us 35 years to be able to honestly, and with all sincerity, give you a precious prize in return for no further reward. So, gentlemen, on this memorable occasion we wish to be placed on record for giving the industry its most magnificent gift free advice, "Buy from NOE."



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com



Wm R.Noe & Sons 43-47 East 10thST. New York

[Everything for Illumination but the light.]

MILLER SALES CHAT

Published to Serve Electrical Merchants

December, 1924

DUPLEX-A-LITE EXTRA!!

DUPLEX-A-LITES All Over the World

London, England—
"Some months ago a small Piccadilly store bought six Duplex-a-lites. Jenners of Edinburgh, Scotland, four hundred miles away, have just ordered thirty similar lights which they told us they first saw in Piccadilly."

So it goes in England — in America — and all over the world.

Every installation sells others. Duplex-a-lites are so distinctive in construction and appearance that no other lighting fixtures can be substituted for them. The dealer who has the agency gets the orders.

Thirty-Five New York Hotels Use DUPLEX-A-LITES

The Bretton Hall Hotel and the Hotel Albert have just ordered Duplex-a-lites. This makes a total of thirty-five New York hotels using Duplex-a-lites. This does not include clubs.

Hotels all over the country are eager to install the newest and best lighting equipment—because guests go to the hotels that provide real comfort. Sell to hotels! They are an excellent market for Duplex-a-lites.

New Office-Lighting Installations

Duplex-a-lites are just being put in the new offices of the American Trust Co. of New York, and in the Girls' Scout Building. There is also an additional installation of Duplex-a-lites being made in the McGraw-Hill Building. These are just a few of the hundreds of big sales made by Duplex-a-lite Agents all over the country.

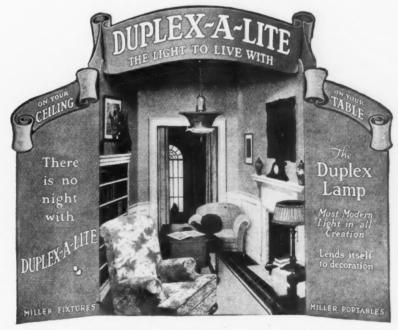
Installa DUPLEX-A-LITE in Every Home You Wire

Many Duplex-a-lite Agents do this and their customers come back to thank them for the suggestion. Once you start this in a city, new customers will come to you with their wiring and fixture jobs—for they will go where they can get Duplex-a-lites.

BILLBOARDS



What does your small newspaper advertisement cost today? Look up your bill. This poster, nine feet high by twenty-one feet long, advertises your name in letters a foot high. And it costs you only 28c. per day. This service is available only to Duplex-a-lite Agents. Ask us about it. Your name on a poster of this size will be seen by every potential customer in your neighborhood. You will be stamped instantly as a large, progressive and reliable concern. This means more customers coming into your store.



This beautiful miniature room display with an actual miniature Duplex-a-lite using 21 candle power automobile lamp will attract people to your window. Furnished to Duplex-a-lite Agents on a cooperative basis. Ask for details.

The MILLER Company Meriden, Conn.

NEW YORK—68-70 Park Place PHILADELPHIA—16th and Chestnut Sts. CHICAGO—116 S. Michigan Blvd. ENGLAND—30-35 Drury Lane, Kingsway, London, W. C. 2.

A Complete Lighting Unit

Orion Design

Screw Collar



Net to the trade



8-in. Globe

If you are in a position to handle our line on an agency basis let us hear from you. We have a good proposition and some excellent territories still open.



SIZES

10½ in.—\$2.50 Net 14 in.—\$3.00 Net 16 in.—\$3.50 Net Pendant 30 in. to Glass 8-in. Ceiling Fixture \$1.25 Net

Prices Not Wired

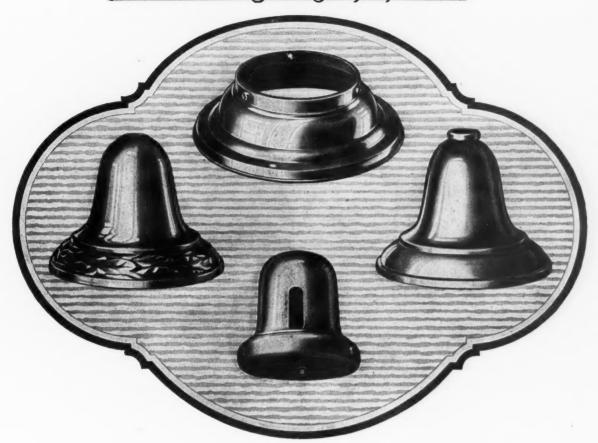
Finishes
Black and Gold
Grey and Gold
Ivory and Gold

14-in. Starlight Glass Globe

Star Glass Co., Star City, W. Va.

Organized to Manufacture Complete Equipments of Standard and Special Design for the Trade

Address all Correspondence to New York Office-129 Crosby St. Telephone Canal 5079



FIXTURE PARTS

from the brass mixture to the finished piece

THEN you place your order for fixture parts responsibility is fixed upon us all the way through.

Production of the entire job - from the making of the brass to the finishing of the completed parts—is under our control.

An experience extending over a period of eighty-five years and embracing the manufacture of 33,000 different brass articles, ample capital, machinery and labor, and a steadfastly maintained reputation for quality and fair dealing form the basis on which we solicit your business.

We invite you to send samples or drawings of fixture parts or other brass articles you are now using or expect to use in quantity, together with specifications and data on requirements, and we will be glad to supply figures on costs and deliveries. Where required, our engineers, designers or brass research specialists will help you solve your problems.

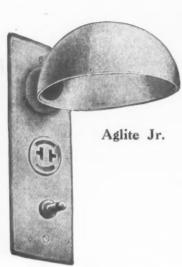
WATERBURY MANUFACTURING GOMPANY

Division of Chase Companies Inc.



WATERBURY CHASE CONNECTICUT

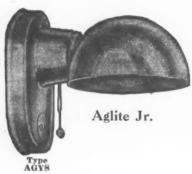
The Chase Companies of California San Francisco Los Angeles



Type

Flush Wall Plate in White Porcelain Enamel Finish, White Opal Shade, Flush Plug Receptacle, Universal Toggle Switch

Price \$10.00



AGY no Switch...\$5.50 AGYS with Switch 6.00

Canopy 6½-in. high, 4½-in. wide, extends 8½-in. Shipping weight 3 lbs.



Type STGB

Permanent

TIME, with its seemingly inevitable power to change, has absolutely no effect on Guth porcelain enameled lighting equipment.

Through our own special process of manufacture, all enamel is fused on Armco Iron, in electric furnaces, under 1600 degrees of heat, thus building a granite-hard finish that will not check, discolor or tarnish.

In addition, Magic-Lite is exclusively equipped with a spring attachment and thumb release which makes bulb refitting, simple, and cleaning, the work of seconds.

Just as our famous Brascolite enjoys a world wide reputation as the most perfect light of its kind manufactured; so the Guth porcelain enamels have become known for their permanence, beauty and correctness of construction.

If you are not handling Guth lighting equipment at the present time, it will pay you to send for our live-dealer sales plan and Catalogs Nos. 10 and 35. No obligation, of course.

The JEDWIN JE. GUTTHI COMIPANY

DESIGNERS - ENGINEERS - MANUFACTURERS

Makers of the World-Famous Brascolite. Over One Million in Use.

Lighting

ST. LOUIS



Equipment

U.S.A

Largest
Manufacturers
of Lighting
Fixtures
Exclusively.

Formerly the St. Louis Brass Mfg. Co., and the Brascolite Company. BRANCH OFFICES (Sales and Service) In Principal Cities

"Notice the Lighting Equipment,"

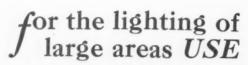
HR 831



YEARS ahead of the way you've done it before, they're saving the industry years of time in assembling Candle Fixtures. All the work-hours wasted on one-arm hickies—piling up with the popularity of Candle Fixtures!—it had to stop. And in line with the new force in Socket Development it has stopped, for those of the trade who know where to look for improvements.

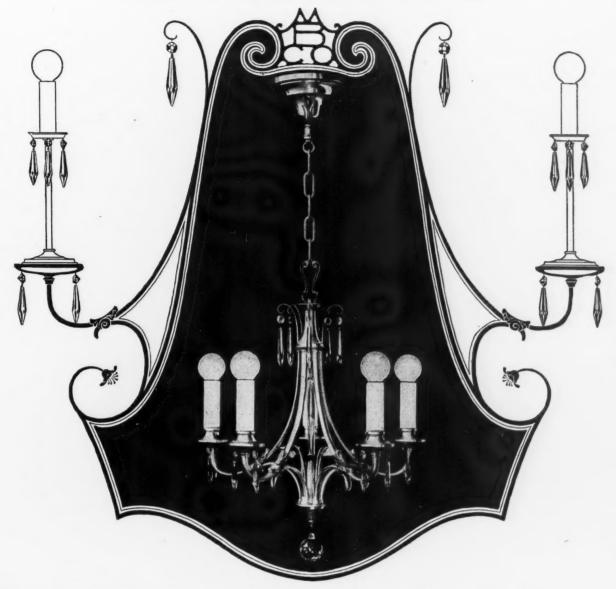
Pull Body No. 90 (upper left) fits every length of candle and holder. It's shortened or lengthened by the adjusting arms, and it's further adjustable with four different-length yokes—interchangeable. Yoke "BY," 2 inches long, meets practically all combinations of candle and holder. Note the set screw in yoke, easily reached after socket is screwed down in holder. Keeps pull chain in alignment with hole in bobeche; holds socket rigidly in place. Complete information on all features and adjustments can be had just as soon as you ask.

THE HART & HEGEMAN MFG. CO. HARTFORD, CONN.



Offices, stores, schools, churches, banks, theatres and hotels are your best prospects for DENZAR, which is made in both plain and oramental types and in various sizes. We have helped hundreds of dealers build up a profitable business in selling commercial lighting and will gladly assist you to do so. Let us hear from you if you want to get your share of this profitable business.





This Is Only One of the Many New Designs Illustrated in Our 1925 FIXTUREBOOK

16-K-5 is a leader for our line of Silver Fixtures. It is designed for the dining room and is executed in the soft, satin lustre of beautiful Butler Silver. For sheer loveliness of line and finish, we are well content to let it stand by itself against all competition.

The great popularity of our Wrought Iron Line has induced us to expand it. New designs—new finishes—have been added. All have been thoroughly tested for popularity before being put on the market.

And since we must always think of prices—all Moe-Bridges Fixtures are quoted on a practical basis to allow you ample margin and yet sell at decidedly popular prices. Our 1925 FIXTUREBOOK shows both new and old favorites, many of them in full color. And there are valuable details and many strong sales points to help you sell.

Send for Your Copy Now.

MOEBRIDGES COMPANY

> NEW YORK

FACTORY & HOME OFFICE

SANI FRANCISCO

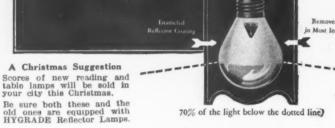
A Better Bulb for Reading Lamps

The shade is pleasantly illumined

the greater portion of the light is cast down on the book.

The Hygrade Reflector Lamp

is better than a clear lamp in most types of reading lamps, because a much larger percentage of its light is thrown down below the shade.



70% of the light below the dotted line)



HYGRADE LAMP CO., Salem, Mass.

Manufacturers of a Complete Line of Incandescent Lamps





Beautiful glass shades may be had to cover lamp bulbs.

Shades also to fit present equipment of ball lamps without change of fixtures.

MAKERS OF "PEARLTONE" GLASS FOR COMMERCIAL UNITS



CHICAGO SHOW ROOM - 17 North Wabash Avenue

GILLINDER BROTHERS, INC.

PORT JERVIS, New York



Speaking of Beautiful Things,

These new type Portables outstrip all competition.

And the "beautiful" part of the line is, that they sell at the price of ordinary pottery! You've really got to see these lamps in order to appreciate fully their exquisite colorings and designs.

It will pay you to get in touch with us at once (if you cannot visit our show rooms) and get full details regarding finishes and prices.

Order a sample, and prove to your own satisfaction that these new lamps are the finest in metal portables on the market today.

WHOLESALE DEPARTMENT

CASSIDY COMPANY, Inc.

Designers and Manufacturers of Lighting Fixtures 101 Park Avenue, New York



For last-minute shoppers—Flashlights!

EVEREADY Flashlights save wandering and wondering in Christmas shopping. Put them out where the crowds can see them, and your problem and the shoppers' problem will be simplified in the lastminute rush.

Eveready - Mother, Father, Billy, Jane, Aunt Harriet, Uncle Charlie,

Grandma and Grandpa, the chauffeur and the maid. There is no age limit.

Tap this rich Christmas market. See that your Eveready display-case is well stocked and prominently placed. A very effec-Everybody needs an tive window display is an assortment of Evereadys combined with Eveready window-display material.

Manufactured and guaranteed by

NATIONAL CARBON COMPANY, Inc. New York San Francisco

Canadian National Carbon Co., Limited, Toronto, Ontario



10,000 JOBBBRS' SALESMEN

500 JOBBERS

20,000 RETAILERS

Profit by

Champion Cooperative Campaign No. 54*



It increases sales from the newest cub to the star salesman himself.

Something automatic.

Starting from the retailer with a self-written signed order waiting for the jobber's salesman.

Mr. Jobber's Salesman:

When the "old man" gets you on the carpet about Christmas time discussing 1925 sales does he know what our factory does for its jobbers?

No cost to retailer, jobber or jobbers' salesmen. We pay the bills. For details write or wire

CONSOLIDATED ELECTRIC LAMP CO.

812 Maple St., DanVers, Mass.

Licensed under General Electric Company's Incandescent Lamp patents





Motorists Must Read As They Drive-Can They Pick Out Your Store At a Glance?

How many car owners drive by your place of business each day? How many know that your store is there?

For Sure Repeat Business

*One jobber in each location entitled to this campaign

Store fronts, not electrically advertised, appear very much alike to passing motorists.

Both drivers and pedestrians will have no difficulty in quickly finding your location if your store is individualized by a FLEXLUME Electrical Display.

Bold, snow-white raised letters of glass against a dark background by day; brilliant, solid letters of light by night. A quality sign that reflects quality merchandise and service.

Durable though moderate in price. Operating expense surprisingly low.



Write us and we will send you photographs and other interesting facts showing how Flexlume is serving your fellow business men to their profit and complete satisfaction.

FLEXLUME CORPORATION

1090 Military Road Buffalo, N. Y.

Factories also at Detroit, Los Angeles and Toronto, Canada

'Phone "Flexlume" All Principal Cities





Definition of "a sales argument"

After I had clinched a sale with my old customer, we got down to some chatty talk. "There are all kinds of 'sales arguments," he said. "For instance, the line of reasoning advanced to convince your trade that you've got the Another, the long-drawn-out battle in some organizations—arguing among themselves about their sales policy!"

Well, this second kind of argument never happens with us. Like the dodo, it's extinct. We thrashed all that out, and shaped up our sales policy. All argument on that subject has been buried.

And the policy laid down was strong, simple and lasting. Here it is: Quality and economy! It means: Prescription-compounded Zellac grades, specially adapted to users' individual needs.

Why not let me tell you how this policy reflects itself in Zellac to your advantage—what Zellac means to you? Let us work out your lacquer problems.

Ango Teller Pres.



Zeller Lacquer Mfg. Co. 342 Madison Avenue, New York

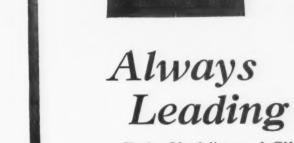
Madison Avenue, Stock rooms and offices at LOS ANGELES: 786 Ceres Ave. CHICAGO: 780 C 551 W. Lake St. SAN FRANCISCO: 67 Steuart St. SAN FRANCISCO: 67 Steuart St. Distributors.

DENVER: Ormor Sales & Supply Co., 1428 Court Place, Distributors.

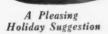


FARIES PATENT PRODUCTS





Faries Verdelites and Gift Lamps make appropriate Christmas Gifts, and at this time when these lamps are advertised in System, Literary Digest and The Saturday Evening Post, there is an opportunity for every dealer to increase his sales. We will cheerfully send newspaper mats, attractive Verdelite blotters, electrotypes, booklets and circulars upon request.



"Notice the Lighting Equipment"

MANUFACTURING COMPANY

Decatur, Illinois

The Meal You Will Enjoy Most



THE MEAL you will enjoy most -is the dinner that thousands of people the world over will eat on December 7th-"Golden Rule Sunday." It won't be a pretentious meal -just soup, bread, stewed fruit and cocoa. But it will give infinite satisfaction to the men and women who eat it. It will help them to put themselves in the places of thousands of children in the Near East who haven't even such simple food to eat. It will make these men and women thankful -it will make them remember the Golden Rule. They will give their contributions to buy food for the 100,000 hungry children in Greece, Syria, Palestine and Armenia-boys and girls who are fatherless, homeless and destitute.

You, too, can have the lasting joy that comes from a simple act of kindness—an observance of the Golden Rule— "Whatsoever ye would that men should do unto you, do ye even so unto them."

Every dollar that you contribute to the Near East Relief will buy twenty dinners of soup, bread, rice and cocoa for these Near East Orphans. One hundred dollars will feed, clothe and educate a child for a year.

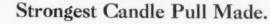
F	Remittance	Form	for	Use	on
	Monday, December 8th				

To CLEVELAND H. DODGE, Treasurer,

Near East Relief, 151 Fifth Avenue, New York City.

To help one of the orphaned children in your care, noted in *Electrical Merchandising*, I enclose \$





Housing of Indestructible Bakelite.

All Parts Rigidly Held in Place.

Contacts Riveted Directly to Terminals, which in turn are Riveted Directly to the Bakelite plates, eliminating Possibility of Loose Screws or Contacts and Flickering of Lamps.

No Breakage in Handling in the Shops.

No Possibility of Distortion or Variation in Shape or Size.

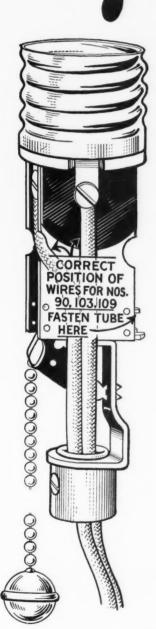
Open Yoke Makes Wiring Easy.

Terminals so Arranged that Connecting Wires may be of Same Length.

Tubing Readily Attached or Detached.

Send for Sample and Prices





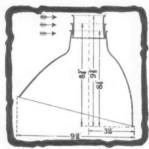
All Metal Reflectors

Silverlite **Facts**

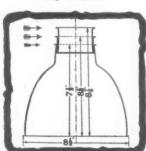


00 1

E-2. For use in high narrow windows.



E-4. For use in low deep windows.



E-5. For factory lighting, lighting through glass ceilings or other special purposes.

NIGHT and day for over a year before we offered the first Silverlite Reflector for sale, our laboratories had them under test, to make sure that they could carry our Frink guarantee.

Fifty-seven years experience, pioneering in window and store lighting went into these tests.

For the past six months, in different parts of the country, competitive window tests have been made.

Some in large stores, some in small.

Always with other types of reflectors as the basis of comparison.

Without exception, Silverlite has proved, and is admitted by the stores holding the tests, to be superior to any other reflector on the market today.

Write us today.

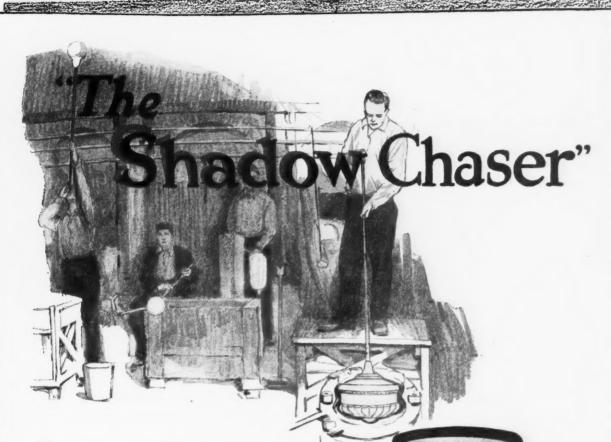
24th Street and 10th Ave., New York

Chicago, Ill. Boston, Mass. Detroit, Mich. Pittsburgh, Pa.

Cincinnati, O. San Francisco, Cal. Cleveland, O. Los Angeles, Cal.

Birmingham, Ala. Portland, Ore. Canada-Associated with The Robert Mitchell Co., Ltd., 64 Belair Ave., Montreal.

Philadelphia, Pa St. Louis, Mo. Atlanta, Ga.



THE extreme care exercised in the production of Monax Glass is in direct line with the manufacturer's conception of its service, which is to look upon Monax not as so much commercial glassware, but as an unsurpassed medium for supplying offices, factories and commercial buildings with better and more profitable *light*.

The Contractor-Dealer selling Monax Glass, the "Shadow Chaser" of modern business, co-operates in this broad, service-giving conception and, as a "Shadow Chaser" himself, shares in the reward of bigger sales and increased profits.

MACBETH-EVANS GLASS COMPANY
(Eastern Division)
CHARLEROI, PENNSYLVANIA

as correct taght, is a

Monax 2475A—A popular globe often selected for commerical use where decorative harmony, as well as correct light, is a factor.

MONAX GLASS for Commercial Lighting

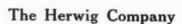


There is a better HERWIG Outdoor Fixture for every home, golf and country club, public and industrial building. Wherever you go you will see HERWIG Fixtures supplying every outdoor lighting need.

Let us quote you on duplicating any of our fixtures in solid bronze.

Our Catalog No. 12 shows 150 numbers. It is free on request.

ALL our fixtures can be furnished in a dark green or dull black finish with cathedral amber, moss, or C. R. I. Glass Panels.



(Formerly The Herwig Art Shade & Lamp Co.) 1753-59 Sedgwick Street, Chicago, Ill.



For Outdoor Fixtures Cast-Metal

No. 221

Bigger Sales with these popular units-

Sell this new commercial unit to stores! Right now they are thinking about brightening up their shops for the Christmas rush.

Exceedingly low in price, this new unit is easy to sell and nets you a BIG profit. It is decorative, yet efficient to the highest degree. Equipped with its own ceiling, the Alabaster glass throws a splendid soft light in great volume regardless of room conditions.

Stores everywhere are replacing with this unit, fixtures consuming twice the current burned by this unit, and getting better light.

Now is the time to sell kitchen units, and here is the popular priced, properly designed and well made unit that you can sell big.

The glass is turned out by one of the best known manufacturers. It has high percentage of diffusion, and practically negligible absorption. White enamelled canopy, pull chain and socket receptacles. Wired complete. Special price for this month only, \$1.50 each, in standard packages of 12.

Both units packed in individual cartons.

Write for samples of these units!

Act quickly! Take advantage of the Christmas season. It isn't too late.



NEW YORK GAS & ELECTRIC FIXTURE SUPPLY CO. 146 Bowery, NEW YORK CITY

Twentieth Century Progress in Lighting





L'PLAUT & Co.

MANUFACTURERS OF LIGHTING EQUIPMENT

432 & 434 EAST 23RP STREET

NEW YORK

TO USERS OF LIGHTING EQUIPMENT:

An enterprise so far reaching and constructive as the Essay Contest conducted by the Lighting Educational Committee must result in a more intelligent understanding of Better Lighting by the public.

Yet, until now in the Twentieth Century, the industry has developed no lighting device of outstanding merit; a fixture that could meet the standards of the engineer, a fixture that could retain its efficiency and still meet the artistic standards in all periods of design.

It follows that the manufacturer must now develop and produce lighting equipment of a higher standard.

We have devoted over a year's experimental work and study to the development of a lighting unit combining novelty, efficiency, and artistic value; and we are glad to announce that after January first we will introduce this new lighting unit. which will efficiently replace

The Candle Fixture, The Silk Shade Fixture, The Enclosed Glass Unit, and The Semi-Indirect Fixture.

In next month's issue we will furnish further information.

Yours respectfully.

L.PLAUT & COMPANY, Incorporated

Horman Plant

Notice the Lighting Equipment,"

For more particulars see next issue

A strong gift appeal—

New! Happy is the Christmas shopper who can find new gifts to give!

Something new — something different — always catches her eye.

Ordinary lamps she can buy in any store, anywhere. Play up something out of the ordinary and she can get it only from you.

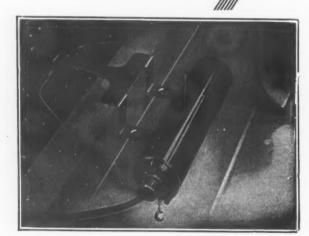
Useful—The Play-O-Lite is a unique gift. It slips right on the piano without tools, without scratching or marring. Throws a soft light right on the music. The lighting of living rooms with portables makes a separate piano lamp very desirable.

Attractive—Finished in mahogany, ebony or walnut, Play-O-Lite matches the natural wood finish of the piano.

Popular priced—It sells at a price within reach of all—

\$5
LIST
HANDSOMELY BOXED

And the profit is as attractive as the price!



PLAYO-LITE W

Write or wire for the details! Don't pass up these Xmas profits.

A. HALL BERRY, Sales Agent 71-73 Murray St., New York City

SAFETY

The most important feature of all electrical installation must, of necessity, be safety. When you are assured of absolute safety at a minimum of cost, it is worth while to investigate the installation that gives you this combination.

Entire safety, with assured economy, are two of the salient features of Utility Snap-In Blanks and Bushings in all electrical installation.

Their safety is guaranteed by the fact that they are fully approved by the Underwriter's Laboratories.

The hole in ½ inch bushings will take single braid, rubber covered wire up to number 8. The ¾ inch will take double braid up to number 4.





Made in two sizes to fit ½ and ¾ inch knockouts in any service or outlet box.

Their economy is proven by:

- 1. Their everlasting wear.
- 2. Being unbreakable, and weather-proof.
- 3. Their easy installation; no skilled labor being required.
- 4. By their moderate cost.

The inspection rules demand that all holes in boxes be closed, and Utility Snap-In Blanks close them most effectually.

Then, too, Utility Snap-In Blanks and Bushings are neat in appearance, and take up a minimum of space wherever installed.

WRITE FOR SAMPLES

UTILITY
TOOL, DIE & STAMPING
COMPANY
Toledo, Ohio

1///100 The Complete Line of Office Equipment

Vertical Files

Strength—Solid welded steel construc-tion.

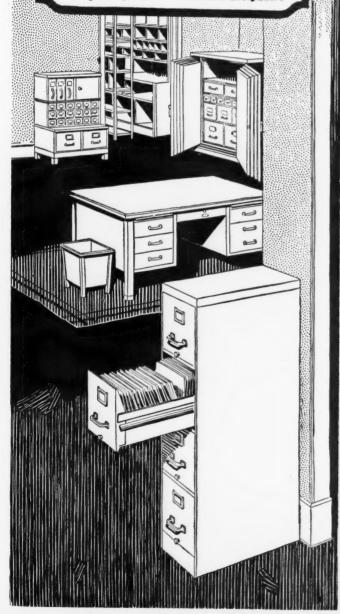
Rich, baked-on ena-mel. Olive green or grained finish.

Smooth Operating—Progressive roller suspension—smooth sliding, noiseless drawers.

Capacity—Special construction gives Long Life—long life, beauty and sat-

isfaction.

Shelving, Files, Desks, Transfer Cases, Safes, er-heights, Sectional Cases, Accessories and Supplies THE GENERAL FIREPROOFING CO. Dealers Everywhere Youngstown, O.







The screws can't come out

Nothing else but this device could effect such a Saving!!

You'll never think of going back to solder after you have experienced the decided advantages of making wire connections with this highly perfected Fixture Connector. The Sherman way is quick-cheap-neat; you don't lose a minute making a connection. You make it right every time. This fixture connector is approved. It helps you save time, labor, money. They actually save more than their

Contractors — Electricians can have a free sample on request. These connectors are packed in small containers 100 to the carton. Easy for the jobber to stock, easy for the contractor to handle. "Your jobber can supply you."

The design is the thing that's interesting contractors everywhere. Sherman Fixture Connectors are made so that the screws can't possibly come out. Then there's the bridge that prevents any mix-up of wires. It's all brass. Conductivity is perfect. No more will you need to bother making wasteful soldered joints. Here is the perfect device.

Here are other money saving devices you ought to use.

Ground Clamps, Sherman Connectors, Sherman Terminals

Write for descriptive literature

H. B. Sherman Mfg. Co. Battle Creek, Mich.





Nilco Policy, Nilco Quality and Nilco Service

Have brought increased business year after year to dealers everywhere.



NILCO LAMP WORKS, INC.

EMPORIUM, PENNSYLVANIA





PROPP XMAS TREE OUTFITS WILL BE

Nationally Advertised to Build Sales for You



Reproduction of our advertisement to appear this Fall in leading Popular Publications

Place Christmas Orders Now With Your Jobber

The M. PROPP CO., Mfgs., New York City



"Seamless" Candles Are Distinctive

Distinctive candles help sell good fixtures.
Are you using FIBRO
"Seamless" CANDLES?

All finishes Lacquered-Enameled (Sprayed) on FIBRE or PAPER Body.

For the cheaper lines we manufacture a low priced candle (not enameled) but covered with White Coated Paper which shows seam, but is best in its class. All sizes, lengths and finishes in stock.

Sole Manufacturers

FIBRO PRODUCTS CO., New Bedford, Mass.

New York Office, 173 Lafayette St.

Complete Stock Carried

Approved Portable Circuit Equipment

Floor and wall plug connection Pockets of all types, Multiple circuit portable spider plugging boxes, inde-structible plugs and connectors. A most connectors. A most complete line for capacities up to 100amp. and over for use on stage, in the shop and laboratory.

Write for Catalogue K

UNIVERSAL ELECTRIC STAGE LIGHTING CO., INC. 321 West 50th Street, New York, N. Y.

Stage Lighting Engineers—Designers and Builders of everything electrical for the stage and theatre.



Just Another Feature That Speeds Them Along

Standard outlet for attaching electrical appliances without removing lamp. Revealed when needed — Concealed when not wanted.



That's That and More in

5H BRAQUETTE

a Hofrichter Product

Get us to tell you about this. It means profits for you.

AMERICAN LIGHTING PRODUCTS COMPANY STATION A · CLEVELAND, OHIO

Be merry this Christmas-

You have a wonderful fixture year ahead!



Have you seen this candle? It puts a fine touch of quality on that end of your fixtures. Costs no more!

SEAMLESS-HARD-and UNIFORM!

Write for Free Sample and Prices!

Elastoid Fibre Company Waltham, Mass.

For the Holiday Lamp Rush!

Velvet Frost



The safe and sure compound for frosting lamps by etching. $2\frac{1}{2}$, 5 and 10 lb. cans.

22 attractive and dependable colors for diping lamps. Transparent and Opaque. Pints, quarts, gallons.

Prompt Shipments

McKAY COMPANY

275 Water St., New York City

AGENTS and SALESMEN

Live salesmen in all electrical commodities can be located through the

"SEARCHLIGHT SECTION"

If you desire an agency or sales connection, use these columns.

8 cents a word.

Minimum \$2.00 an insertion.

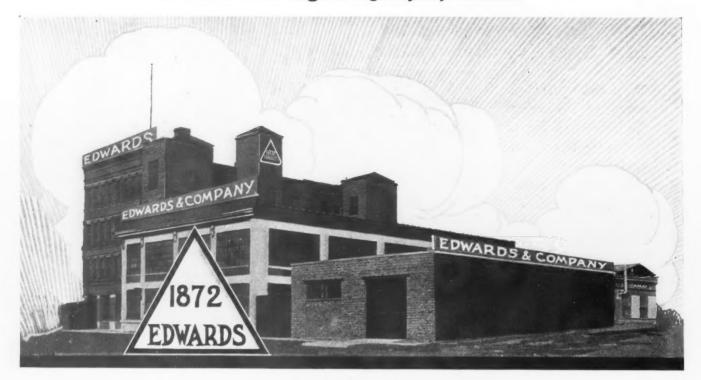
0129



It contains latest data on commercial lighting. This information will show you how to get a firm hold on this class of business in your territory. Send for it today.

PLANETLITE Co.

342 Madison Avenue, New York



Back of the trademark

Progress-

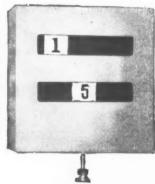
Half a century has passed since Robert Edwards laid the foundations of Edwards and Company. He worked in a cellar. His sales were small, and he made the electrical apparatus he sold by hand.

Yet from this modest beginning the present-day house of Edwards and Company has grown. The plant covers approximately 250,000 sq. ft. of floor space with every modern manufacturing facility. The staff numbers nearly five hundred people. Yet the same Edwards family is at the helm and the same business principles and standards of quality established by Robert Edwards in 1872 are rigidly upheld today.

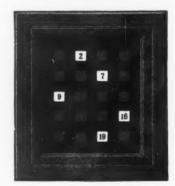
A Battleship's 14-Inch Gun Turret

is subject to more shocks and bumps than any place we can think of!

And EDWARDS ANNUNCIATORS were chosen!



No. 91-White enamel metal caseonly slightly higher priced than the old-fashioned oak case.



Flush Type Electric Reset— Simple, sturdy and easily installed.

EDWARDS and COV

- *Atlanta, Ga.
 *Boston, Mass.
 *Chicago, Ill.
 Columbus, Ohio
- *Carrying full stocks.





Made for Everybody's Satisfaction Packed for Your Convenience

The trade appreciates especially the convenient and attractive packing of



BULL DOG

We put it up in 1, 2, 4 and 8-oz. rolls packed in containers as follows:



32 1-oz. packages (2 lbs.) 16 4-oz. packages (4 lbs.) 16 2-oz. packages (2 lbs.) 8 8-oz. packages (4 lbs.)

The containers are beautifully printed in color needing only to be set on the counter to begin their work. Bull Dog Tape is a quick-repeating item which the merchant finds very profitable because it is used by so many people for so many different kinds of work

BOSTON WOVEN HOSE AND RUBBER COMPANY, Cambridge, Mass.

HUBBELL





Sockets

Unexcelled in quality—well-made throughout.

Push-through, Pull, Key and Keyless types.

HARVEY HUBBELLING DEVICES
BRIDGEPORT CONN. U. S.A.

2534-℧



ELECTRICAL WIRING DEVICES



National Metal Molding Company

WORLD'S LARGEST PRODUCERS OF ELECTRICAL CONDUITS AND FITTINGS

1103 Fulton Building, Pittsburgh, Pa.

Represented in All Principal Cities



The Rigid Conduit That Bends

Metal Molding Company Pittsburgh, Pa.

Please send free pocket token demonstrating the results of Sherardizing.

Name

Firm

Address

IRING DEPENDABLE EVICES









Porcelain Sockets

have important advantages over metal shell sockets for bathrooms, cellars, kitchens and other places where dampness, steam, dust or fumes are present. Porcelain does not deteriorate under any of the conditions present in these locations and the finish is indestructible.



Switch

Rosette

Bodies

and

Porcelain Sockets

have important advantages over all other makes. They are constructed on the same wiring principle as brass shell sockets, and, in many of the various devices, the interior parts are identical with those used in brass shell devices.





Socket **Bodies**





Caps

On your next order for porcelain sockets, specify WEBER.

The Line Is Complete



For catalog and samples, write

General Sales Agent

80 BOYLSTON STREET BOSTON II, MASSACHUSETTS

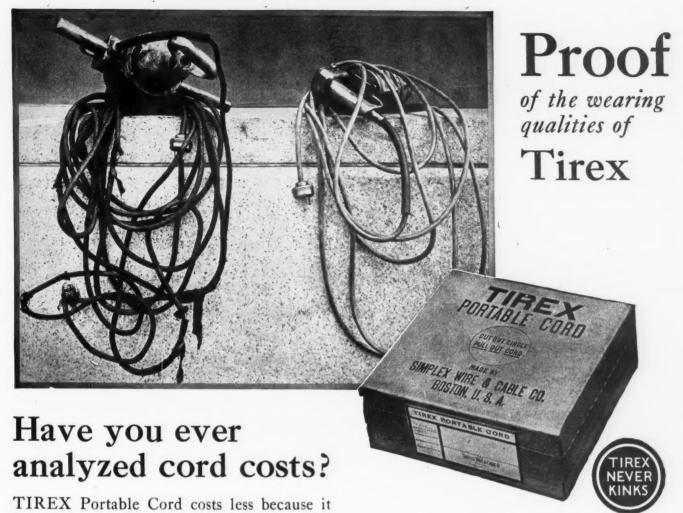


Sixteen Bases

District Sales Representatives in New York Philadelphia

San Francisco

Chicago



lasts longer. The two cords shown above were used in an automobile service station in Massachusetts on similar work for the same length of time.

A letter from the user states:

"It has been our experience that ninetynine per cent of our drill troubles are cord failures

We figure we have saved money by equipping all our drills with TIREX, as since doing so not one of them has been laid up from faulty cords."

Two or three conductor Nos. 18, 16 and 14 and two conductor No. 12 are packed in special cartons containing 250 feet each, so constructed that the cord may be drawn out as needed without disturbing the remainder of the coil. All sizes are furnished in special lengths as ordered.

SIMPLEX WIRE & CABLE @

MANUFACTURERS

201 DEVONSHIRE ST., BOSTON 9

CHICAGO SAN FRANCISCO NEW YORK

TIRE X PORTABLE CORD

"RING AND TALK-DON'T WALK"

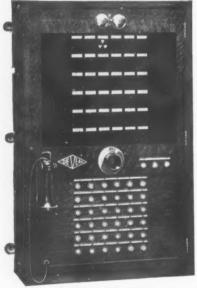


DEVEAU "INTERTALK"

Apartment House Telephone Apparatus



PATTERN No. 80
"Loud-Speaking" Cordless Vestibule
Outfit With Letter Boxes



PATTERN No. 2200
Janitor's Answering and Calling
Telephone Annunciator



Surface Wall Type PATTERN No. 2524

"LOUD-SPEAKING"

Sectional-Common-Talking-System

With Drop on Janitor's Station for Each Suite and Vestibule

RECOMMENDED FOR

Apartment Houses having several vestibule entrances, but all under the supervision of one janitor; where it is desirable to have vestibule talk to its respective suites and not be disturbed by conversations from another vestibule. Conversations are common to all stations of each section; however, a conversation in one section will not interfere with a conversation in any other section. Sectional-Common-Talking-Systems are a combination of two or more Common-Talking Systems arranged so that each Common-Talking System is independent of any other on the system. Tradesmen's Stations can be used on this system.

MANUFACTURED BY

STANLEY & PATTERSON, Inc. 250 West St., New York, U. S. A.

SEND FOR NEW DEVEAU CAT. No. 40

SUITE TELEPHONES



Surface Wall Type PATTERN No. 1172





Overload Protection That Carries Overloads

Here's one feature that means much. The Domestic Automatic Safety Switch will carry the overloads that develop when clothes become momentarily "bunched" in the wringer, or "wadded" in the tub. It allows a margin of several seconds for the overload to correct itself before it breaks the circuit. This means that while the Domestic gives absolute protection against damage, it does not stop the washer unnecessarily every time there is a temporary overload condition. This protection without annoyance does away with many service calls.

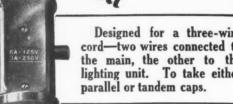
Available for all washers at a practical price. Correspondence invited.

THE DOMESTIC ELECTRIC COMPANY, CLEVELAND, OHIO

Pomestic Safety Switch















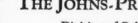


Noark Fuses blow on the dot

that's why they sell on the spot

> NOARK fuses blow on the dot

OT TOO SOON - NOT TOO LATE



THE JOHNS-PRATT COMPANY, Hartford, Conn.

Division of Colt's Patent Fire Arms Mfg. Company BOSTON · NEW YORK · CHICAGO · SAN FRANCISCO EXPORT DEPT., 30 Church St., New York, N. Y., U. S. A.

nns-Prai

has the ability and capacity to serve you in NINE ways





















There IS a Difference!

Even tho' all *Non-Metallic Conduit* may look alike on the outside, with its silvery mica finish, there is a vast difference, as the Contractor finds out when he starts using it.

DURADUCT

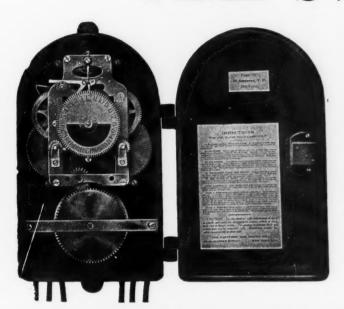
Reg. U. S. Pat. Off.

with its Single Wall and Roller-Bearing Wireway is so much easier to fish, makes a so much cleaner cut, and is so much less trouble to install that the best contractors see the difference right away, and on future orders to Jobbers instead of ordering just "Loom" they

Specify DURADUCT

Tubular Woven Fabric Co.
Pawtucket, R. I.

ARTFORT TIME SWIT



HARTFORD TIME SWITCHES and A. HALL BERRY-two names long linked together, and standing for a quarter of a century as the best in automatic time switch construction, means more today than ever before.

The 1924 model Hartford Time Switch embodies more real and lasting value than has ever before been offered in any automatic time switch.

The special marine type eight-day clock movement manufactured exclusively for the Hartford Time Switch by the Seth Thomas Clock Company, has been strengthened and improved to an extent which insures accurate and lasting service.

Hartford Time Switches are now equipped with a new switch unit, equipped with extended terminals enabling the contractor to bring his conduit right up and coupling to the time switch case.

Improved packing and boxing methods insure the safe carrying of Hartford Time Switches to all parts of the world.

While the 1924 model Hartford Time Switch costs more to build than ever before, there has been no advance in cost to you—on the contrary your profit has been increased.

There is a Hartford Time Switch in just the right type and capacity for every practical time switch purpose, and it is the best time switch you can get for that purpose.

Bulletins, Prices and Information on Request

A. HALL BERRY

SOLE SALES AGENT

71-73 Murray Street, New York City

CLIFTON Rigid Steel Conduit



CLIFTON IS MADE TO FILL THE CONTRACTORS' NEEDS

It is a practical conduit, quick to install and easily fished. The interiors are specially treated and extra smooth; the threads are clean and sharp.

Use Clifton on your wiring contracts.

Our insulating tapes and compounds also are endorsed and specified by many of the largest contractors.



CLIFTON MANUFACTURING CO. 67 Brookside Ave., Boston, 30, Mass.

Rhode Island **Red** Rubber Covered Wires

Are the cleanest to handle and easiest to pull in-will not soil the hands, walls or ceilings-used in place of black.

Made with or without polarity marker.

Approved by the underwriters.

Made by

Providence **Insulated Wire Company**

58 Waldo Street, Providence, Rhode Island

MANUFACTURERS OF

Rubber Covered Wires-Lamp Cords-Reinforced Cords All Types-All Sizes

GARFIELD Insulation

"GUMMON" is the standard and original Cold Molded Insulation, made by the oldest and largest producer. Continuously improved to meet increasingly exacting requirements.

Get our booklet. It will pay you to know Garfield Insulation — Strong — Serviceable — Economical — Heatproof.

GARFIELD MANUFACTURING CO. GARFIELD, N. J.



At Last! An Alternating Current Combination Volt-Ammeter

Roller-Smith takes particular pride in presenting its latest contribution to the instrument art — a combination volt-ammeter for alternating current. Convenient size, light weight, rugged and — above all — accurate and reliable.



The Type GSA Voltammeter and other Type GSA instruments are fully described and listed in Bulletin AH-160.

Your copy is ready for you. Send for it.

ROLLER-SMITH COMPANY Electrical Instruments, Meters and Circuit Breakers

MAIN OFFICE: 18 Park Place NEW YORK

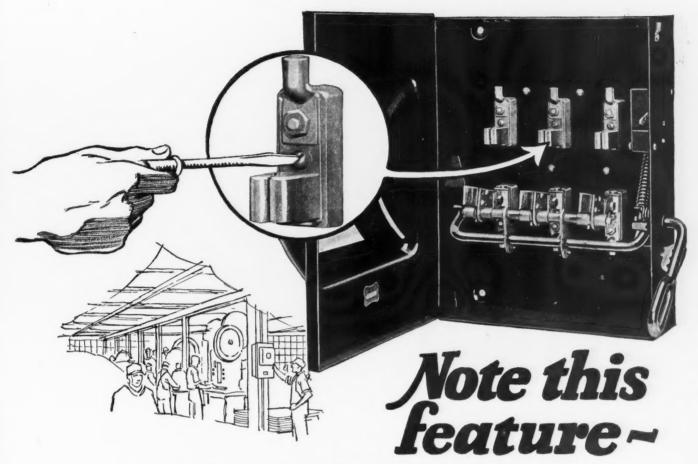


WORKS: Bethlehem

BALTIMORE, 113 E. Franklin St. BIRMINGHAM, Brown-Marx Bldg BOSTON, 141 Milk St. BUFFALO, Ellicott Square Bldg. CHICAGO, 430 So. Green St. DALLAS, 2002½ Live Oak St.
DENVER, U. S. National Bank Bldg.
DETROIT, Ford Bldg.
LOS ANGELES, Consolidated Bldg.
MEMPHIS, 493 South Main St.
MONTREAL, Power Bldg.
road: THRALL ELECTRIC COMPAN

NEW ORLEANS, Whitney Central Bidg. PHILADELPHIA, Otis Bidg. PITTSBURGH, Keenan Bidg. ST. LOUIS, Railway Exchange Bidg. ST. PAUL, Ploneer Bidg. SALT LAKE CITY. Dooly Bidg.

SAN FRANCISCO, 589 Howard St. SCRANTON, 939 Capouse Ave. SEATTLE, Hinckley Bldg. TORONTO, 183 George St. WASHINGTON. Evening Star Blds



Any Square D Part Quickly Removed or Replaced

Ease of maintenance is an outstanding feature of Square D Safety Switches.

All current-carrying parts are mounted on individual bases of tough, moulded insulating material. Any switch part can be replaced in a few minutes without removing the base from the box or disconnecting all wires.

The Square D individual bases have no metallic veins, withstand hard usage, and are very light in weight.

Add to this important feature assured safety, key-controlled accessibility, positive quick make and break action, enclosed mechanism, ease of assembly and adjustment.

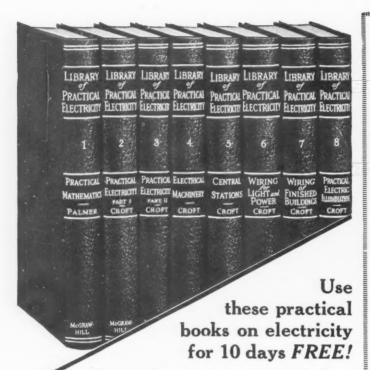
These are among the things that have given Square Dits dominating position and have made Square D standard for years in major industries.

We invite your personal inspection of Square D advantages. Ask your jobber, or write us direct.

SQUARE D COMPANY, DETROIT, U.S.A.
FACTORIES AT: DETROIT, MICH., PERU, IND.
BRANCH OFFICES: Boston, Buffalo, Chicago, New York, Pittsburgh, St. Louis, Philadelphia, Cincinnati, Milwaukee, Atlanta, Cleveland, San Francisco, Los Angeles, Syracuse, Kansas City, New Orleans, Baltimore, Columbus, Minneapolis, Indianapolis

SQUARE D COMPANY, CANADA, LTD., WALKERVILLE, ONT.
BRANCH OFFICES: Toronto, Montreal

SQUARE D Safety Switch



If you order now, you get free with the library, Taylor's TRANSFORMER PRACTICE.

YOU will never know how easy it is to master electricity until you see the LIBRARY OF PRACTICAL ELECTRICITY, by Terrell Croft.

And you will never know how much a knowledge of electricity means to you in dollars and cents until you gain this knowledge.

gain this anowhedge.

The man who knows the most about his work is the man who gets the most in his pay envelope. Croft will teach you as he has taught 40,000 others—teach you by a new, revolutionizing method that saves you time effort and money. He will teach you electricity as practiced by experts and qualify you for an expert's pay.

The Croft Library

A combined reference library and home study course in practical electricity

Croft tells you the things you need to know about motors, generators, armatures, commutators, transformers, circuits, currents, switchboards, distribution systems—electrical machinery of every type, its installation, operation and repair—wiring for light and power—how to do it mechanically perfere in accordance with the National Electrical Code—wiring of fin.lshed buildings—underwriters and municipal requirements—how to do a complete job, from estimating it, to completion—illumination in its every phase—the latest and most improved methods of lighting—lamps and lighting effects, etc.

Free examination—no money down—only \$1.50 in ten days and \$2.00 a month until paid

Fill in and mail the coupon attached and we will send you the entire set of eight volumes for ten days' Free Examination. We take all the risk—pay all charges. You assume no obligation—you pay nothing unless you decide to keep the books. Then \$1.50 in ten days and the balance at the rate of \$2.00 a month. Send the coupon NOW and see the books for yourself!

When your first payment of \$1.50 is received, we will send you your free copy of Taylor's Transformer Practice.

I ree Examination Coupon

McGraw-Hill Book Co., Inc., 370 Seventh Avenue, New York,

Gent Electri tion. month wanted receipt	tlemen:— city (shi If satisf: until tl l I will	Please pping netory, ne spe write first p	char I v ecial you ayme	rges price for ent of	end of retu	he Cr aid) fo \$1.50 \$19.5 arn sh	oft Lil or 10 d in ten i0 has ipping	days' free days and been paid instruction	Practical examina- d \$2.00 a d. If not ons. Upon free copy	
Home	Address									

 Employed by
 E.M. 12-1-24

 Occupation
 E.M. 12-1-24

City and State....

Dealers—Plug in on Real Sales With Stuart Plug Clusters

Display a carton of 2 light and 3 light Stuart Vulcanized Fibre Plug Clusters and get quick turn-over. They sell fast because they appeal. Practical, indestructible, lightest on the market.

No. 8-11-2 light....List price, 50c No. 9-11-3 light...list price, 621/2c





TRIOLET

Here's a new, compact plug having 3 taps. Once seen always preferred.

No. 4-11-List price, 50 cents



Dealers discount 50%. Special discount in large quantities. Send for samples.

Chicago, New York, St. Louis, San Francisco

Peerless Light Company

General Offices and Factory 663-671 W. Washington Blvd., Chicago, Ill.





KILLARK transformers are guaranteed. The purchaser is instructed to return to the factory for free replacement any transformer that does not give satisfactory service.

Send for booklet and discount to dealers.





KILLARK ELECTRIC MFG. CO. 3940-48 Easton Avenue, St. Louis, Mo.







Now ready for delivery.



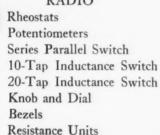
Electrical Products of Quality

Luminous Indicators (Pendant and Adhesive type) Tu-Lite Plugs (Screw and Pin Type)

Appliance Plugs Appliance Switch Plugs

Cords and Plugs Cords and Plugs with Switch Universal Switch for Appliance Plugs

RADIO



T. C. SMITH & CO.
3907 Powelton Ave.
PHILADELPHIA, PA., U. S. A



Announcing our NEW Pin Type Tu-Lite Plug. Now ready for delivery.















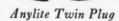
The Biggest Event of the Year

is before you

The biggest merchandising event of the year will be crowded into the next few weeks. Buying of Christmas gifts will be carried on with great fervor. The full money-making possibilities of the season are scarcely realized.



Anylite Regulator



HOW TO MAKE THE MOST OF THE OPPORTUNITY

Display your electrical appliances and give Anylite Regulators and Plugs a prominent position with them. One helps the sale of the other. Then you make two profits instead of one.

Also keep Anylite Products well displayed after Christmas. Many people who receive electrical appliance gifts will need Anylite Plugs and you can make big sales then.



ANYLITE ELECTRIC CO. FORT WAYNE, INDIANA



Anylite TP-3





The

Built by makers of "Reliance Time Switch"

RACINE Time Switch

Combines simplest design with most rugged construction, and great accuracy. Eight day movement, and complete interchangeability of parts. Liberal discounts on attractive prices.

RELIANCE AUTOMATIC LIGHTING CO. 1927 Mead St. Racine, Wis., U. S. A.

RUBBER INSULATED WIRES AND CABLES



National Electrical Code Standard Intermediate (Red) Thirty Per Cent

> Wire built under the direct supervision of experienced engineers, skillfully and honestly manufactured with one purpose and result.

> > Continuous Service

A-A WIRE CO., Inc.

General Sales Offices: 110 East 42nd St., New York City

Branch Office: The Sloan Bldg., Cleveland, Ohio

Factory: Newark, N. J.

"JIFFY" Loom Clamps

(JIFFY BUSHINGS)



For Loom or Conduit Knockout, with 7/32, $\frac{1}{4}$ and 5/16-in. tubing.

APPROVED by the Underwriters for years.

By Inspectors, Contractors and Jobbers because they have been tested and proved O.K. by each. "Jiffy" Loom Clamps grip the loom firmly, secure the loom to box or plate, fill the opening around the loom, and are EASILY and QUICKLY installed.

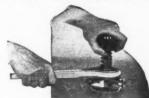
DISTRIBUTED BY LEADING JOBBERS

Write us for free samples

JIFFY Adjustable CUTTER

CUTS COST OF CUTTING HOLES

Speed Facility Neatness



Adjustable
Diameters
34 in. to 6 in.

Ask your Jobber for a "JIFFY" Circular or write direct to

PAUL W. KOCH & COMPANY
17 South Wells St., Chicago

IDEAL FOR HEATING APPLIANCES Y-26 HIGH HEAT MICA PLATE

Y-26 High Heat Mica Plate gives service equal to that of natural sheet mica as insulation for heating units; shows a big saving in cost over the latter where 9-in. square or more, and strips over 6 in. in length are used-Can be cut or punched to any form, or supplied in sheets 24 in. by 42 in., ten mils thick and over.

Its heat resistance is at least equal to that of natural mica. Contains no sodium silicate; absorbs no moisture. Possesses unusual rigidity and strength even under high temperatures. Is of natural mica color, almost transparent, and does not deteriorate when stored. Used and endorsed by leading manufacturers. Send for samples, prices and descriptive pamphlet.

NEW ENGLAND MICA CO., Waltham 54, Mass.

New York Office - 220 Broadway

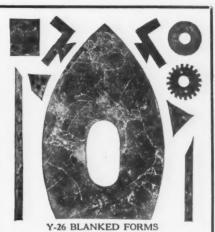
PEERLESS STANDARDIZED MICA INSULATION

India Moulding Plate
India Segment Plate
Amber Segment Plate
Amber Small Segment Plate
High-Heat Plate (Volatile
Binder for heat units)

Flexible Mica Sheets
Mica Cloth (sheets or rolls)
Mica Cloth (sheets or rolls)
Tubes, Bushings, etc.

Commutator Segments
Washers, etc.
Y-26 High-Heat Mica
Plate
Mica Lamp Shade Plate

Plate Mica Lamp Shade Plate



When you want Men

put your advertising for them on the same basis as other publicity.

If you want competent and efficient assistants, experienced in the field served by this journal, you will naturally find such men among our readers—which include the keenest and most progressive men in the industry.

Get in touch with a number of these men a:.d select the one that is best suited for your needs.

SEARCHLIGHT SECTION

Only \$2.00 for 25 words

DOLPHIN

A code wire of high quality, known for its great dielectric strength and resiliency and used for its dependability and maximum service. TRITON, intermediate grade, 25 per cent Para, and NEPTUNE, 30 per cent Para, are other widely known and used Atlantic

ATLANTIC Insulated Wire & Cable COMPANY Office and Factory: Rome, N. Y.



O.K.

We Built Our Business on Quality

Aprub **Splicing** Compound and Friction

Splicing Compound and Black Friction

Our Prices Right

Tape

Get it from your Jobber

Tape

Appleton Rubber Co.

Main Office and Factory Franklin, Mass.



Cutting the Cost of Each Job

That means more net profit on each job and a bigger figure on the profit side of the sheet. Hundreds of contractors have cut a big slice off their overhead costs by getting a

MARTIN Portable Vise Stand

It is portable; quickly and easily set up. Your men take it along to the job. On it they do conduit bending, pipe threading and similar operations that they used to have to do in the shop. The time saved in running between the shop and the job mounts up and pays for the Martin in short order.

Try one for 10 days free. Write for it today.

H. P. Martin & Sons 621 E. 2nd St., Owensboro, Ky.



No-Draft-Outlet-Plates

THE LAST WORD in a house wiring job, for NEATNESS, QUICK-NESS and CHEAPNESS. Thev cannot bе MATCHED. See your DEALER, if he can't serve you, write us. USE with LOOM or B.X.

Approved By The National Board of Fire Underwriters



JOHNSON MANUFACTURING COMPANY

314 Cherry Street, Philadelphia, Pa. Manufacturers of No-Draft-Outlet-Plates



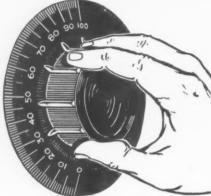
TWIN-LITE

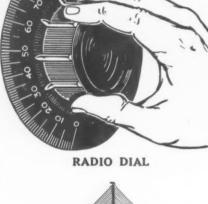


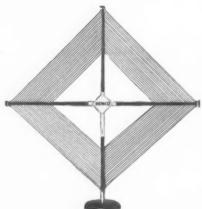
TACH-LITE



TRIP-LITE







LOOP AERIAL

HEMCO **PRODUCTS**

are made to sell easily, to give you a satisfactory margin of profit, to bring new business and repeat orders, and to aid in building up and maintaining good will. The fact that HEMCO PRODUCTS are leaders in their field, outselling others, means that you will realize more sales and profits by handling and pushing this line as our present customers are doing.



TEE-LITE



HEATER PLUG



HEALTH PAD



RADIO SOCKETS

Watch for the big XMAS broadside giving free display helps to your XMAS windows.

RGE RICHARDS & COMPANY Inc.
W. Monroe Street Chicago Illinois 557 W. Monroe Street



Music Master Help to Sell Your Sets

A FAULTLESS demonstration such as only Music Master can give is the surest way to sell a receiving set.

Also it is the easiest way; the most profitable; Music Master becomes a part of the sale, and the customer is satisfied with his purchase.

The supersensitive Music Master reproducing unit picks up the most fugitive radio impulses. The tone chamber of heavy cast aluminum eliminates distortion and keeps signals clear and distinct. And, of utmost importance, the amplifying horn is wood, unequalled for resonance and tonal quality.

Let Music Master be your master salesman. It supplies the clinching argument that wins.

Music Master Corporation

Makers and Distributors of High-Grade Radio Apparatus Tenth and Cherry Streets

Chicago

Philadelphia

Pittsburgh

Connect any Music Master in place of headphones. No batteries required. No adjustments.

A Sales Drive for



Radiola X

The Regenoflex circuit in a rich cabinet, with its own loudspeaker built in. With four Radiotrons WD-11. List......\$245.00

FOR Christmas—two pages in the Post, full pages in a long list of important magazines—big newspaper ads. For 1925, a great "carry-on" campaign. The sales impetus of Christmas will swing right on through the New Year—capture the gift money purchases of January. Order ahead—keep your stocks in shape. Keep the sales mounting—right up to Christmas—and after!

"There's a RADIOLA for every purse"

RADIO CORPORATION OF AMERICA

DEPT. 156

Sales Offices:

233 Broadway

10 So. La Salle St. Chicago, Ill.

28 Geary Street San Francisco Cal.

This symbol of quality

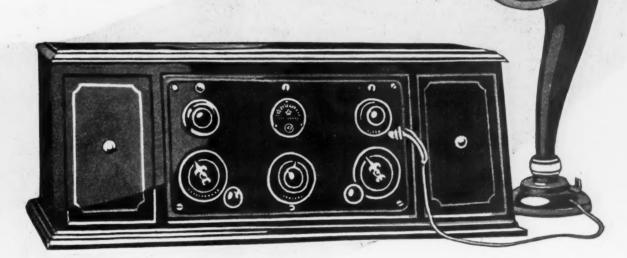
New York



is your protection

Radiola

the Regenoflex - for Christmas - for 1000 5



Radiola Regenoflex

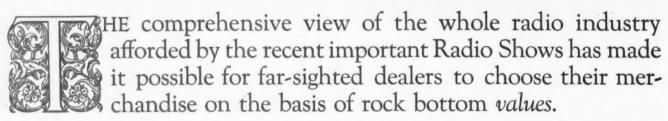
Sensitive, selective, non-radiating. Famous for its tone quality! With four Radiotrons WD-11 and Radiola Loudspeaker. List......\$191.00

Radiotrons Radiola Loudspeaker

Both are in line for heavy Christmas selling. In the fan magazines—and in newspapers—big advertising for both of these will run straight up to Christmas—and after.

Radiola REG. U.S. PAT. OFF.





The most rigorous comparisons favor Magnavox Radio all along the line—in the degree of interest shown by the general public for the Magnavox exhibits; their established faith in the good will and fairness of The Magnavox Company; the distinctive appearance and unfailing operating excellence of every Magnavox product; and in the exceptional service given by Magnavox to every Registered Dealer.

At the height of the holiday season, it is the Registered Magnavox Dealer who is best equipped to take full advantage of

the enormous impetus which the radio business has received this year.

A Magnavox Radio Product for Every Customer

From the man who drops in to replace a burnt-out tube, to the one who calls to purchase a complete receiver with reproducer built in, or as a separate unit, the Registered Magnavox Dealer can supply practically every demand.

Thanks to the favorable influence exerted by the Magnavox National Advertising and selling policy, the individual Registered Dealer soon finds his own merchandising efforts multiplied in efficiency and results. Every Registered Magnavox dealer receives direct assistance permitting him to operate over an unusually large consumer territory.

How to Become a Registered Magnavox Dealer

Application for enrollment as a Registered Magnavox Dealer should be made on the regular form provided for that purpose by representatives of Magnavox Distributors and Jobbers.

In passing upon these applications, an exceedingly high standard for qualification is required by the Magnavox Company consistent with the degree of service given each Registered Dealer, and the great value of the Magnavox franchise. As the number of dealers will be limited to the point where each dealer can be assured a large volume of Magnavox business, application should be made promptly.

We will be pleased to send you our broadside announcement describing the complete Magnavox Radio line and dealer policy. A personal representative will also call upon you on request made to nearest Magnavox Distributor or Jobber, whose name will be sent you on application.

THE MAGNAVOX COMPANY

OAKLAND, CALIFORNIA

NEW YORK: 350 West 31st St. CHICAGO: 162 N. State St.

SAN FRANCISCO: 274 Brannan St.

Canadian Distributors: Perkins Electric Limited, Toronto, Montreal, Winnipeg



Magnavox Reproducers for all receiving sets

The first radio Reproducer ever made was the famous Magnavox electro-dynamic type.

These instruments contain reproducing units of extreme sensitivity and power.

M4 - \$25 R3 - \$35 R2 - \$50



Magnavox Tubes

Can be substituted for ordinary tubes to great advantage in any receiver . \$5



Magnavox Receiving Set TRF-5 5-tube tuned radio feacy, receiver with U

A 5-tube tuned radio frequency receiver with Unit Control, in carved mahogany cabinet.



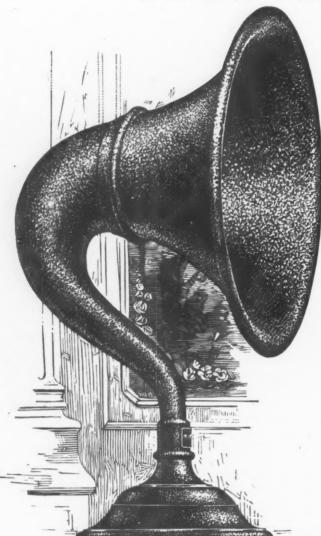
Magnavox Receiving Set

Identical with the above as to circuit and panel but encased in carved mahogany period cabinet with built-in Magnavox Reproducer: (shown large on facing page).



ATER

LOUD SPEAKERS



During more than a quarter of a century it has been the unswerving policy of the ATWATER KENT COM-PANY to produce the best at any cost.

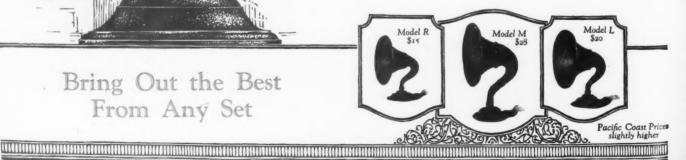
True to tradition, ATWATER KENT Loud Speakers possess a quality that proves itself in remarkable performance.

With this prestige and outstanding value back of them, ATWATER KENT Loud Speakers have won for themselves a nation-wide acceptance.

Add to this the mighty pulling power of a national advertising campaign devoted exclusively to ATWATER KENT Loud Speakers—and you, as a radio merchant, have as fine a business proposition as you could find.

Send for descriptive literature and dealer price list ATWATER KENT MANUFACTURING COMPANY 4721 Wissahickon Ave., Philadelphia, Pa.

Bring Out the Best From Any Set



ATWATER EXENT RECEIVING SETS

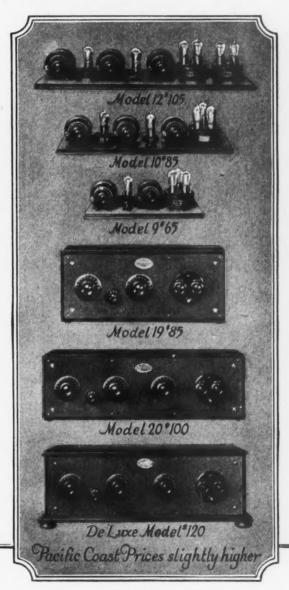
The radio merchant who is building for himself a prosperous and lasting business is the one who is handling right now a sound and well-known line.

If every radio merchant could go through the ATWATER KENT Plant, the largest and finest of its kind in the whole world, he would know why there is no better radio made. He would see for himself that here is an organization with the promise of permanent leadership.

The merchant who handles ATWATER KENT Radio has the assurance that year after year he will keep the confidence of his customers—and be able to say to himself, "I know I handle the right line."

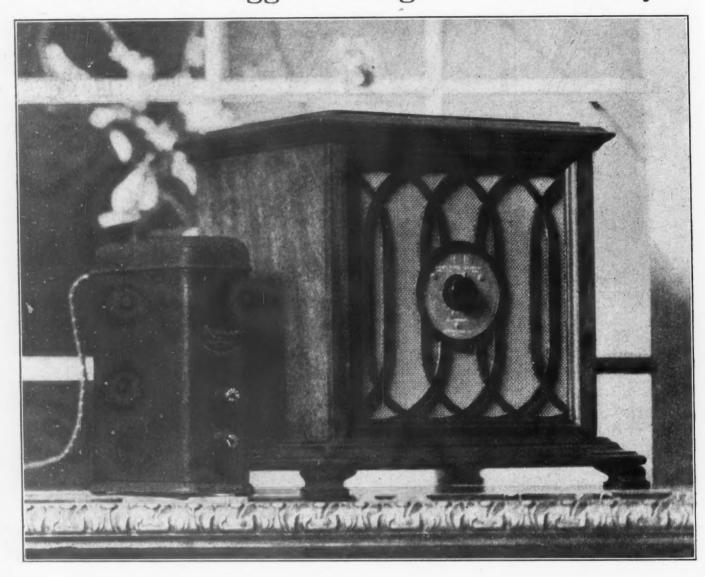
Send for descriptive literature and dealer price list

ATWATER KENT MANUFACTURING COMPANY 4721 Wissahickon Ave., Philadelphia, Pa.



Think What Is Back of It

Two of the Biggest Things in Radio Today



IF you are not handling Timmons Radio Products order some Adjustable and Non-Adjustable Talkers from your jobber. They list at \$35 and \$18.

Tell your jobber to send you also some B-Liminators which take the place of "B" batteries. This B-Liminator is said by authorities to be the greatest radio achievement of the year. It operates from any alternating current 110 volt, 60 cycle outlet. Pat. May 15, 1923. Our increased factory facilities are enabling us to ship B-Liminators more promptly than heretofore.

Tell us to send you some of our new signs and folders. Display these signs, distribute the folders and be identified with a line and name that is now permanently in the front rank of radio.

-And remember that all Timmons Radio Products are absolutely guaranteed to the dealer, jobber and consumer.

TIMMONS

We help you to keep Timmons Radio Products Moving

No matter how fast a product moves it will always move more rapidly when it is advertised and displayed.

Timmons national advertising definitely creates the desire for Timmons Radio Products, but you must do your part and display them if you would quickly turn desire into sales.

To help you to do this and link up with our Saturday Evening Post, Radio publication and newspaper advertising we have prepared attractive counter and window display stands on Timmons Talkers and B-Liminators. These are shown in greatly reduced size on this page. They are both in three colors. The B-Liminator sign is the actual size of the B-Liminator, and the Talker display about one-third actual size.

We'll be glad to send you one or a couple of each of these signs, also a quantity of folders featuring the same products. These also are shown here.

On the left-hand page is shown the illustration appearing in our Saturday Evening Post page advertisement, December 13th issue. This advertisement alone will be seen by possibly 10,000,000 people.

Gear in with this advertising

Timmons Radio Products Corporation Germantown, Philadelphia, Pa.



Radio Products

11

Radio Manufacturers:

You said to us,

During the past year leading radio manufacturers have

During the past year leading radio manufacturers have come to the McGraw-Hill Company. They've said to us, "Each of the ten different classes of stores that sells radio has its own trade papers. We have hardware, radio, electrical, talking machine and many other kinds of trade publications that reach parts of the radio market. But no one magazine reaches the whole market. Help us eliminate this waste in radio trade advertising. Give us one magazine that reaches every retailer and wholesaler of radio set and accessories."

"Radio Retailing" is our answer to this need for one publication to reach the whole radio trade. Commencing January 1925, "Radio Retailing" will be issued as a supplement to our two well established publications, "Electrical Merchandising" and "Electrical Retailing." Its circulation will be 45,000 copies monthly.

Through "Electrical Merchandising's" readers, "Radio Retailing" will reach the electrical jobber, his salesmen, the dealer and the electric light and power company.

in Radio advertising"

Through "Electrical Retailing's" readers, this magazinesupplement will reach the other classes of stores selling radio —music, furniture, exclusive radio, department, hardware, auto supply, sporting goods, drug and other stores.

"Radio Retailing" will not only *reach* all the radio retailers and wholesalers, it will be *read* by them. The best staff ever assembled for any trade publication—experts in radio and practical marketing methods—will have behind it the resources of the McGraw-Hill Company. "Radio Retailing" will be a real radio retailers' publication.

Here at last is one publication that will place your sales story before all your market. Through it you can reach your prospects at the lowest possible cost, because you need buy advertising space in only one medium—"Radio Retailing."

Let us send you some interesting facts about the help "Radio Retailing" can give you. This coupon is for your convenience.

Radio Retailing McGraw-Hill Co. 471 Tenth Ave. New York City

Radio	Retailin	g
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—a McGraw-Hill Publication 471 Tenth Avenue, New York City Send us the facts about "Radio Retailing."

We make

Mr.

Company

Address....

The New PARAGON Doubles Its Selling Field

PARAGON Receivers have always had a strong selling appeal for the radio fan — for the people who know sets and who know radio values and are willing to pay for such values.

The new Paragon line still appeals to these people, but adds also the wide field of set buyers who are influenced by price.

Dealers in radio everywhere tell us the new Paragon Four is the biggest value they have seen. Retailing at \$65, it gives the purchaser a good-looking, finely constructed, four-tube set employing the new Paradyne non-radiating circuit, giving clear, strong loudspeaker reception over practically unlimited range. They can't ask more than this of sets costing three times as much, and requiring more tubes and greater battery power.

Backing this new receiver is a complete line carrying Paragon quality into the three-tube and two-tube classes. If your jobber is not yet showing these new sets, get in touch with us at once and take advantage of the big advertising drive that is putting Paragon over nationally.

ADAMS MORGAN CO., Inc. 14 Alvin Ave., Upper Montclair, N. J. Makers Siace 1915 of Record-holding Radio Receivers



PARAGON TWO \$27.50

Two tubes. Single dial control. Loudspeaker volume over moderate range. Mahogany case, 11 inches long.





Four tubes. Single dial control. Range almost unlimited for clear, loudspeaker reception. New Paradyne non-radiating circuit. Goodlooking mahogany case, 21 inches long.



PARAGON THREE \$48.50

Three tubes. Single dial control. Loudspeaker volume over surprising range. Mahogany case, 17 in. long.



Look for the Red Triangle



Progressive Charlotte is an Eveready Town

Dry"B"Batteries

are more economical

and more dependable

than any other

source of plate

current!

"EVEREADY HEADQUARTERS—free | trick of selling 200 Eveready "B" testing service—come in and get the right battery for every radio

use." Thus the Interstate Radio Corporation, Charlotte, N. C., has advertised and grown. It has recognized the value of attractive window displays. Charlotte has about 50,000 popula-

shops. This one shop turned the | selling easier.

Batteries in a week.

Ask Mr. R. F. Ferguson, vice-

president of the Interstate Radio Corporation. He will tell you that Eveready quality batteries mean satisfied customers, that Eveready trade service means dealer satisfaction, and that Ever-

tion and a number of active radio | eady national advertising makes

Eveready Radio Batteries are manufactured and guaranteed by

NATIONAL CARBON COMPANY, INC.

Headquarters for Radio Battery Information

New York

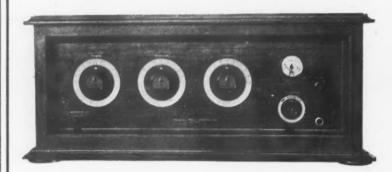
San Francisco

Canadian National Carbon Co., Limited, Toronto, Ontario



Announcing the COLONIAL





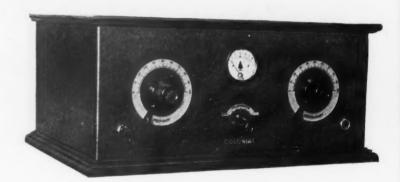
The Colonial 16

is a five-tube, dry battery operated receiver. It employs two stages of tuned compensated radio frequency amplification, detector, and two stages of audio amplification. All circuits are shielded and compensated to give uniform response on all waves. No regeneration; no radiation; no howling.

Cabinet by Brewster, the finest builder of custom built automobile bodies in the world. Beautiful in design; executed in the best of taste. Panel in bronze, done by a new etching process. Maximum of selectivity and sensitivity. Can be logged with greatest accuracy. Absolutely no body capacity. All batteries enclosed in cabinet.

The Colonial 17

is a four-tube, dry battery operated receiver. It employs one stage of tuned compensated radio frequency amplification, detector, and two stages of audio amplification. The cabinet and panel is a novel combination of beautifully decorated metal and natural grained, lightly polished wood. It is highly sensitive and its selectivity is well above the average. Can be logged with ease and accuracy. All batteries are enclosed in cabinet.



A Revelation in Radio

Experts in radio have described Colonial 16 and 17 as "a revelation in radio." They are the latest contribution to radio science of Dr. Fulton Cutting and Mr. Bowden Washington, and represent the culmination of years of experimenting and testing. We waited until we were absolutely sure that the sets were mechanically and electrically perfect before we placed them before the trade. Now we know they are absolutely right and we guarantee every Colonial receiver that leaves our factory to give perfect satisfaction.

Merchandising Policy

Exclusive franchise and absolute territorial protection are two of the outstanding features of what Colonial gives its jobbers or distributors. We believe the jobber is entitled to this protection from the manufacturer.

Colonial has developed a dealer

co-operative sales service that is unique and that is sure to be of signal importance to the retail merchant. Colonial offers direct to the dealer, through the jobber, this sales plan personally inaugurated by Colonial "dealer salesmen."

This has at once been recognized

as the best, most direct and most efficient manner of securing dealer sales that has yet been devised for radio.

We have a booklet completely describing the Colonial Merchandising Plan. Write for your copy today.

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COLONIAL RADIO CORPORATION

EAST AVENUE AND TENTH STREET LONG ISLAND CITY, N. Y.





No. 104 U-V 199 Socket with Octagonal Base



11. 15 or 21 Plate, Low Loss Condenser



No. 116 UV 199 Triple Panel Mounting Sockets



No. 103 WD-11 Socket No. 152 Antenna Insulator





2, 3, or 4-in. Two-Piece Bakelite Dial



No. 400 Plain Condenser





New Features that catch sales-

The Hoosick line of radio parts stands out from others by reason of the many new features this line presents.

These features catch sales. They bring new people to your store and give you the reputation of carrying the most up to the minute merchandise.

Remember too—we're in our big new plant now, and making 24-hour shipments on all orders.

This means a smaller investment for the dealer and enables you to keep your money turning all the time, and to keep your stock fresh and upto-date.

24 hour shipment

Write for Literature and Prices!

STACKHOUSE & ALLEN CO., CARL A. STONE CO., 27-29 No. Morgan St., 644 New Call Bidg., San Francisco, Calif.

WOOD & LANE CO., 915 Olive St., St. Louis, Mo. SCOTT BROS., LTD.
322 St. Catherine St., West, Montreal, Que., Canada RUSSELI, ELECTRIC SALES CO., 355 Donovan Bidg., Detroit, Mich.

Radio Parts Hoosick Falls



CARL A. STONE CO., 429 Insurance Exchange Bldg., 318 West 9th St., Los Angeles, Cailf.

HOOSICK FALLS

Mfg. Co., Inc.

New York

C. C. PIERCE, 11 High St., Boston, Mass.

WALTER I. FERGUSON & CO., 14th & Walnut St., Month 7th St., Minneapolis, Minn.

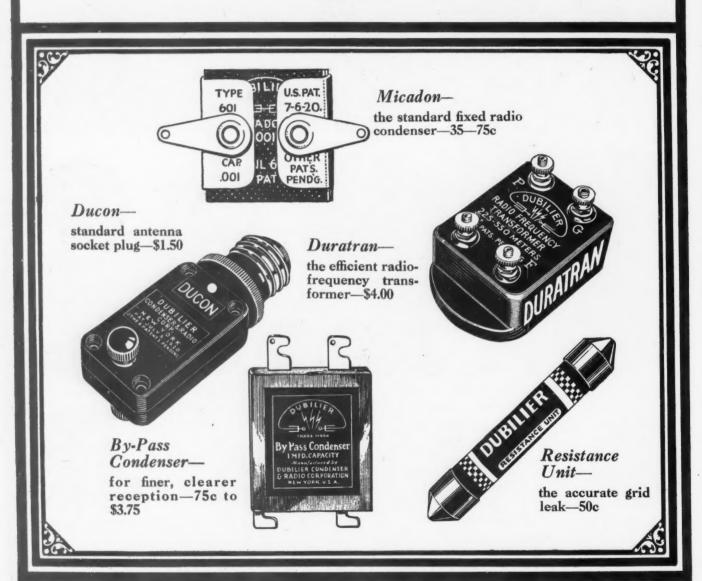
CARL A. STONE CO., 116 Minneapolis, Minn.

CARLA. STONE CO., 116 Minneapolis, Minn.

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CARLA. STONE CO., 111 Minneapolis, Minneapolis,

Fast Selling Radio Specialties



Live radio dealers carry them. For address of nearest jobber write 47-51 West 4th St., New York

Dubilier

CONDENSER AND RADIO CORPORATION



This December advertisement in the general magazines shown, as well as in all the prominent radio publications and many farm papers, will add even a greater impetus to Crosley Sales.

BE SURE AND PREPARE TO MEET THE DEMAND GOOD JOBBERS EVERYWHERE HANDLE CROSLEYS

Write for Complete Catalog

THE CROSLEY RADIO CORPORATION
127 Sassafras St. POWEL CROSLEY, JR., President Cincinnati, O.

Crosley Owns and Operates Broadcasting Station WLW.



A KEYSTONE LIGHTNING



Listed as standard by the National Board of Fire Underwriters.

At the psychological moment

When he has picked his antenna material, or chosen a new set, that's the time your customer can be sold a Keystone Radio Lightning Arrester. Show it to him—tell him the Underwriters' require it and for him to follow the instructions which accompany each arrester. Tell him it is the cheapest reliable insurance he can buy.

The body of the Keystone Arrester is moulded of genuine Bakelite and all parts are of brass, thus providing an arrester which is most durable and attractive.

The Keystone Arrester is backed by over 32 years' experience in the design of lightning protective apparatus and its electrical characteristics leave little to be desired. It is a strong, sturdy, reliable device and is in line with the better radio products on the market. Yet it retails at the popular price of \$1.50.

You will make no mistake in handling the popular Keystone and you will make many satisfied customers.

Backed by national advertising and the producers of a million and a quarter lightning arresters.

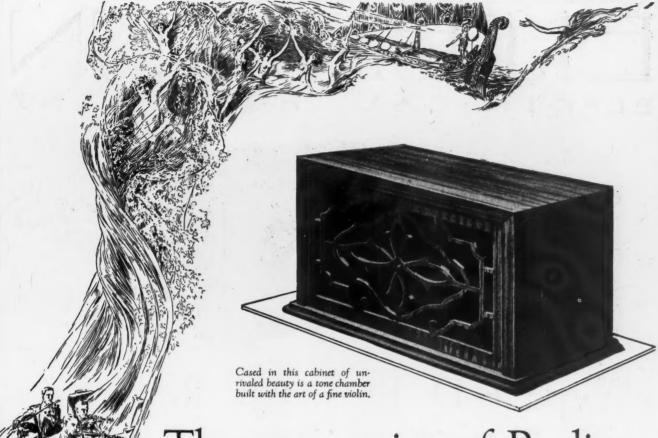
Ask your jobber for prices or write direct



PHILADELPHIA 17th and Cambria Sts. PITTSBURGH 629 Oliver Building

NEW YORK 50 Church St. SCRANTON 316 N. Washington Ave.

CHICAGO BOSTON 88 Broad St. Lyman Tube & Supply Co., Ltd., Montreal, Toronto, Winnipeg, Vancouver





Out of the heart of a Sonora

SOUND is one thing—pure tone is another. Today radio enthusiasts want tone, whether it's the human voice, or a violin, or a full orchestra.

Therefore "horns" must give place to scientifically correct sound-chambers. Phonographs went through this development, and radio is going through it now.

Artists and acoustics experts agree that the Sonora laminated wood sound-chamber is the supreme achievement in tone-reproduction

It won world recognition at the Panama-Pacific Exposition. Now it has been given to radio, in the Sonora Radio Speaker.

Immediate popular success has proved that thousands of radio enthusiasts were waiting for just such an improvement in receiving. With the Sonora Radio Speaker they can get every tone of voice, every delicate phrase of violin or orchestra—absolutely clear, true, and natural.

Dealers find that a brief demonstration sells the Sonora Radio Speaker. And they quickly appreciate its display value, for nothing in all radio equipment is handsomer than Sonora cabinet work.

Results so far indicate that every dealer who wants to please his customers permanently will recommend the Sonora Radio Speaker. But of course the best way to prove a speaker is to hear it yourself. So we suggest you order a Sonora Radio Speaker and give it a personal trial. The price is \$30—less Sonora's liberal discount to dealers.

Sonora Phonograph Co. Inc., New York City. Canadian and Export Distributors, C. A. Richards, Inc., 279 Broadway, New York.



Cross-section of the Sonora tone chamber. Ply after ply of wafer-thin, seasoned wood, moulded cross-grain around a form as perfect as modern acoustics can make it. No unnatural vibration. Every tone is reproduced in all its clear, pure beauty



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ne

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pu



Type 6-D Broadcast Receiver

Non-oscillating ~ Non-radiating

SPECIFICATIONS

Circuit: Two stages of tuned radio frequency amplification, detector and two stages of audio frequency amplification.

Non - oscillating. Non - radiating.

Astatic transformers used to minimize mutual induction.

Tubes: Five in all. Jacks provided for either five or four tube operation.

Batteries: Either storage or dry-cells. Cables: Complete set supplied for "A" and "B" batteries.

Wave lengths: 200 to 600 meters, with uniform efficiency of reception.

Aerial: 75 to 125 feet, single wire.

Panel: Aluminum, with attractive crystal black finish. A perfect body capacity shield.

Dials: Sunken design. Shaped to fit the hand and permit a natural position in tuning.

Rheostats: Adequate resistance for all standard base commercial tubes.

Condensers: Single bearing, low leakage losses.

Sockets: Suspended on cushion springs which absorb vibrations.

Cabinet: Mahogany, with distinctive lines and high finish. Ample space provided for "B" batteries.

THE real, intrinsic value of the 6-D Receiver can be fully appreciated only by making direct, side-by-side tests with other makes.

Such comparisons need not be confined to sets in the same price-class. The 6-D is the equal, in every detail, of many receivers priced \$25, \$50 and even \$75 higher.

Performance of the highest order, strikingly attractive appearance and moderate price—all these elements of true worth are found in the 6-D.

You will note its clarity and the full, generous volume. You will also observe the unusual sharpness of tuning. And the finely carved, high finish mahogany cabinet will make a strong appeal.

Price \$125.00 without accessories. If your jobber cannot supply you, write to us.

EISEMANN MAGNETO CORPORATION

General Offices: 165 Broadway, New York
ROIT SAN FRANCISCO CHICAGO





one control simplicity!

NE of the greatest advancements of recent radio achievement. And besides this all-important feature of operation there are thirteen other Thermiodyne advantages.

No other receiver possesses all these fourteen points. No wonder it is the most talked about outfit today. Thermiodyne involves principles entirely new in radio reception - six tubes, 3 stages of thermionic frequency, detector and two stages audio frequency—all with ONE CONTROL!

Stations always come in at same point with the single control—selections are made according to the wavelengths as published in newspapers. Thermiodyne calibrations are in wavelengths instead of meaningless degrees. Affords practically instantaneous reception. If it's in the air Thermiodyne will get it regardless of distance.

Tuning in six to ten different stations in a minute's time is no task, even for a child. Read Thermiodyne's 14 POINTS (on right) and you'll surely enthuse over the sales possibilities of this newest exploit in the radio field. An unconditional guarantee backs up every sale.

THERMIODYNE RADIO CORPORATION

PLATTSBURGH, N. Y.

Price \$140

[Ther · my · odyne]

The 14 Points of Thermiodyne Supremacy

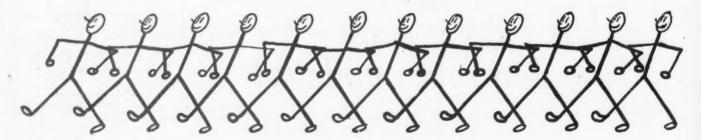
- -Single control
- 2-No outdoor antenna necessary No directional loop
- Wavelength or kilo-cycle pickup of sta-tions, instead of meaningless degrees or numbers
- Cannot squeal or howl
- Cannot radiate
- Cannot distort 8—Newspapersgivetime and wavelengths
- Thermiodyne picks them at the exact setting every time
- 10—Nologging of stations,
- nothing to remember 11-Stations of different wavelengths cannot interfere with each other
- 12-Six tubes 3 stages of thermionic frequency, detector and two stages audio frequency
- 13-Distance, volume, clarity, without fuss or excuses
- 14-180° turn of single control, like instant tourofdozensofcities

Table-Talker

The horn of the Table-Talker is matched to the unit. No scratchy sounds/



Just clear, mellow, true tone-all the time.



Sell Table-Talkers by their Tone!

Brandes





The name to know in Radio



No external battery required. Plug in same as headphones.

Dear Mr. Martin:

". . . I am anxious for you to have a good loud speaker so that the reproduction of the music will be at its best for you, so that you, as a music critic, will not be disgusted with radio music. Last week I got a Thorola from the Reichmann Company of Chicago and I am so struck with this speaker that I am writing this, my first letter of endorsement of a radio part."

(Signed) L. A. NIXON

General Manager THE RADIO DEALER

MR. MARTIN of the New York World is not the first music critic Thorola loud speaker has challenged in radio's behalf. Thorola raises radio beyond comparison with mere reproduced music. Thorola renders music itself, just as surely as instruments before the microphone. Artists pronounce Thorola "the pipe organ of loud speakers" for its matchless combination of purest tone and greatest volume, made possible only by exclusive betterments.

The Thorola Controlled Mica Diaphragm embodies the most advanced acoustic principles ever applied to a radio reproducer. The Thorola Separix literally assorts vibrations, preserving the tonal blends and shades vital to real music. Thorite horn compound, itself a supreme achievement, ends "sound interference" by the horn. And the Thorola Synchronizer perfectly balances Thorola in each set, just as every other circuit factor must be balanced for perfect reception.

New stations are brought in pure and strong, by superior Thorola amplifying efficiency. The original music, speech or entertainment is faithfully preserved by Thorola acoustic improvements. Thorola is powerfully guaranteed to fulfill every claim by America's pioneer loud speaker manufacturer. Thorola results are unmatched at any price. Thorola has every profit feature.

REICHMANN CO., 1729-35 W. 74th St., Chicago

"RETAIL PRICES"

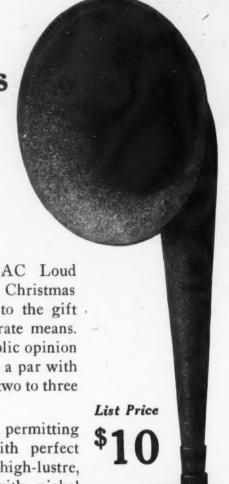
THOROLA 4 . . . \$25
THOROPHONE
Powerplus Speaker . \$45
THOROLA 6
Phonograph Attachment \$15
THOROLA 9
Cabinet Loud Speaker \$40



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Every Dymac Product Guaranteed One Year

"I'm making Santa Claus carry an extra pack this year!"



The DYMAC Line

Our broad experience as designers and builders of telephone and electrical devices stands back of every DYMAC Radio Accessory and Part. The following are fast selling DYMAC Products:—

Type "F" Popular Headset List, \$3.50

Type "G" Supreme Headset List, \$5.00

Types "G" and "H" Audio Frequency Transformers • List, \$4.00

Crystal Set, Complete with Phones List, \$7.50

> Loud Speaker Unit List, \$5.00

> > Rheostat List, \$1.00

AT \$10, the new DYMAC Loud Speaker is the logical Christmas present. A happy solution to the gift problem for people of moderate means. It has already qualified in public opinion as a high-grade instrument on a par with other Speakers that cost from two to three times as much.

Outside thumbscrew control, permitting widest range of volume with perfect modulation. Finished in high-lustre, black deckled enamel with nickel trimmings.

All DYMAC Products are made completely in our own plant. None is assembled. They sell at popular prices, assuring quick turnover.

Electrical Products Mfg. Co.

Sole Makers of DYMAC Radio Equipment
69 Sprague St., Providence, R. I.



Take Us Up on This

We want to send you a Yaxley Rheostat on trial. See for yourself the correct design and superior construction of this splendid device. Put the rheostat to every test. If you do not pronounce the Yaxley Rheostat a remarkable value and a sales maker, you. can return it. We're betting you'll like it. Will you take us up on this?



Rheostat and Potentiometer

Midget **Battery Switch**

Entirely new and improved in design. One nut mounting in single panel hole. Smooth in operation. Gives fine tuning without use of vernier attachment. All connections soldered through to terminals.

The Yaxley Rheostat has been adopted as standard equipment by many of the leading manufacturers of high grade receiving sets.

Potentiometer has exactly the same construction as rheostat.

CODE NO.																		P	RICE
		Rheostat																	
		Rheostat																	
120-K-20	ohm	Kheostat	with	knob				 ٠			٠				۰	0			1.35
120-D20 130-K30	onm	Phoestat	with e	hnob	• •	•			0 1						۰	۰			1.60
130-D-30	ohm	Rheastai	with	diel				 ۰		• •	۰	۰			0	۰	•		1.00
200-200	ohm	Potention	neter.										 			•			1.85
400-400	ohm	Potention	neter.				 Ĭ.	 Ť			Ĭ	Ĭ		ľ		ı			1.85

One-Phone Plug



No disconnected cords, no poor contacts when the Yaxley Phone Plug is used. Heavy bronze springs grip cord tips full length. Phones instantly connected without tools. Short length handle makes this plug particularly desirable for portable sets. This is an excellent seller.

Code No. 50......\$.50

Yaxley Mfg. Co.

Dept. M., 217 No. Desplaines St., Chicago

Sales Offices: New York, Philadelphia, Baltimore, New Orleans, Minneapolis, Kansas City, Los Angeles, San Francisco

Very compact. One nut mounting in single panel hole. Hard rolfed bronze springs. silver contacts. Insulated from metal frame. Quick snap-break contact. Escutcheon plate shows "Off" and "On" position. This item is a leader.



Code No. 10.....

Jacks



Code No. 4 Interstage......\$1.00

"Yaxley Jacks are good jacks."

That's the verdict of the radio industry. Thousands bought every day. Your customers will like these features:

Single Nut Mounting-Solid Brass Frames. Phosphor Bronze Springs. Pure Silver, self-cleaning contact rivets. A permanent, pleasing nickel finish.

QUANTITY	CODE NO.	DESCRIPTION	LIST
3 3 2 2	4 1 3 4A	Interstage	70

***************************************	Use the coupon u	
YAYIDV		ig supplies will
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obligation, send me	A dvertising. G. CO., Dept. M., 217 No. Desting that I may return any or my maximum discounts the	Plaines St. Co.
My jobben 4-		described
Code No.	******	****
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Use marging	onal items.	
Use margins for additi	onal items.	***********



HARRY ALTER & (

Ogden and Carroll Avenues · CHICAGO

Distributors for the following nationally advertised lines of electrical and radio supplies:

Benjamin Products Hold-Heet Appliances Appleton Fittings Save Lamps Simplex Irons Liberty Stoves Wadsworth Switches

Freed-Eisemann Sets Radion Panels Premier Parts Signal Apparatus **Balkite Chargers** Brandes Head Sets Dubilier Condensers

and many others equally as well known

WHOLESALE EXCLUSIVELY





Radio

- what it is
- how it works
- -how to make a
- set
- how to locate troubles
- how to remedy them

Just Out

This practical book has been well named. With it the radio enthusiast has a complete reference guide. Not only does this book explain what radio is; how it works; how to make a set; how to locate troubles; how to remedy them, but it gives the very latest information on the testing of sets and how to select, operate and care for them.

Practical Radio

By James A. Moyer, Director of University Extension, Massachu-setts Department of Education, and John F. Wostrel, Instructor in Radio, Division of University Extension, Massachusetts De-partment of Education.

248 pages, 5½ x 8, illustrated, \$1.75 net, postpaid.

The book presents the fundamental principles of radio so The book presents the fundamental principles of radio so simply and clearly that any person of average training will be able to read, understand and apply them. Both the inexperienced amateur and the technically trained specialist will find the book valuable. In Chapter XI there are accurate working drawings as actually used in radio shops, together with complete lists of materials required, for constructing eight valuable, activing actually used in radio shops, together with complete lists of materials required, for constructing eight typical receiving sets.

The latest up-to-date information on

Control of static, atmospheric and directional effects, radio maps, thermo electric "A" and "B" batteries, radio photog-

raphy, methods of locating open and short circuits, test-ing defects in transformers, vacuum tubes, antennas and ground wires, etc.

See this real, helpful book FREE for 10 days

You are under no obligation to buy unless the book is worth every penny of the \$1.75 asked for it. Chapter XII on COMMON TROUBLES AND THEIR REMEDIES is well worth twice this amount. See this book, use it FREE for ten days. Here is the coupon.

McGRAW = HILL FREE EXAMINATION COUPON

McGraw-Hill Book Co., Inc., 370 Seventh Avenue, New York.

You may send me on 10 days' approval Moyer and Wostrel's Practical Radio, \$1.75 net, postpaid. I agree to remit for the book or to return it postpaid within 10 days of receipt.

Signed

Address

Name of Company



CONTINENTAL

"New York's Leading Radio House"

Quick sellers for the holiday season



Trirdyn 3-R-3

Wholesale
Distributors Only



Radiola III-A

Radiola III-A and Crosley Trirdyn 3R-3 are easily sold on their merits—efficient performance, attractive appearance and fair price.

These two types of receivers are in big demand NOW! A radio Xmas with either of these two sets will satisfy the most discriminating buyer.

Send your orders in—and we will supply you immediately. Don't forget your big radio season is NOW! "Go ahead and sell"—

2090-Q

CONTINENTAL

RADIO

and

ELECTRIC

CORPORATION

15 WARREN STREET

NEW YORK, U. S. A.

About the two men who looked alike-

They had the same hair, same eyes, same forehead, nose and chin. But—one was a noted scientist, while the other was a town loafer. They looked alike, but weren't built alike.

It's the same with tuners. Though they look somewhat alike, one may have been designed by a skilled technician and the other put together by some one who could wind wire neatly. But it doesn't take the average man very long to tell which he has bought, once he tunes in his set!

Patent Applied for

For Better Reception



Variable Clarifying Selector

a 4 Variable Clarifying Selector—affords complete control of antenna coupling. Eliminates wasteful taps, fixed couplers and all other antenna tuners. Separates tangled stations and clears them up to full brilliance. Works on any standard antenna circuit. Truly a wonder! \$7.00 retail.

VT-25 Variotransformer — A tuned R. F. unit giving amplification of two ordinary R. F. trans-

formers. Step-up, I to 6. Delivers two-tube efficiency on one tube. Requires no condensers. Very effective with our Variable Clarifying Selector, but is of itself a fine addition to any tube set. \$8.50 retail.

These are the units used in the popular Lloyd C. Greene Concert Selector, now rapidly being adopted throughout the country.



VT-25 Variotransformer

Write for Trade Prices on the L+ K line of Tuning Devices for all hook-ups.

LANGBEIN + KAUFMAN, Dept. M., 654 Grand Avenue, NEW HAVEN, CONN.

LANGBEIN+KAUFMAN

High Grade "Low Loss" Tuning Devices





Longer Ranges with Anaconda AntennaWire

Range in radio reception depends as much on the conductivity of the antenna as on the sensitiveness of the set. Anaconda Antenna Wire is especially made to give the highest possible conductivity.

It has the strength required by the Board of Fire Underwriters and the ductility necessary to insure easy bending and workability. Supplied in long and short lengths to meet any dealer requirement.

How it is Supplied

Anaconda single cop-per wire, tinned or untin-ned, No.14 and other sizes.

Anaconda stranded copper wire, seven strands of No. 22 B. & S. gauge.

Anaconda silicon bronze wire, seven strands 18 B. & S.

How it is Packed and Shipped Anaconda antenna wire, single or stranded, is shipped either on wooden reels holding 25,75,100 or 200 pounds or in cartons containing coils of 100 or 200 feet.

Anaconda antenna wire always bears the Anaconda trademark—a guarantee of quality and dependability.

ANACONDA COPPER MINING CO. THE AMERICAN BRASS COMPANY

Wire Sales Division:

eral Offices: 25 Broadway, N.Y. Western Offices: Conway Bldg., Chicago

cartons!



TINNED

Especially developed to increase conductivity-to maintain always the efficiency of bright, new wire-and to eliminate stretching.

"Any" wire isn't good enough. The amazing conductive, strength and long life characteristics of Copperweld as against ordinary aerial wires is proven by tests made by the largest radio concerns in the world.

Sell Copperweld in cartons. Saves good time. The aerial construction directions printed on the carton answer all questions—the carton keeps your stock clean. Your customers will appreciate the extra quality!

COPPERWELD STEEL COMPANY

NEW YORK

SAN FRANCISCO Braddock P. O., Rankin, Pa. CHICAGO



A way to increase radio sales

Selling the Valley Battery Charger is a mighty good way to increase radio sales. Here's what we mean:

Radio fans need a Valley Battery Charger for their 6-volt A batteries. But the Valley Charger will also recharge one to four 24-volt B batteries. Then, when you sell a Valley Charger, sell storage batteries too, for the best reception is to be obtained when the contract of the contract is to be obtained when storage batteries are used through-

The Valley Battery Charger is the one charger which will recharge all batteries. It has a grained and engraved Bakelite panel which harmonizes with the radio set. Quiet in operation. Full 6-ampere charging rate. No liquids or

> VALLEY ELECTRIC CO. 3157 S. Kingshighway, St. Louis, Mo.

Belden Radio Items that sell themselves



Rosin-Core Solder

Made to special specifications for radio work. Just enough flux for a good job. Sold in dealer cartons of 155 cut lengths.

Head-Set Cords

Offered in 5 ft. and 6 ft. lengths for replacement of radiophone cords. Loudspeaker cords also available.





Hook-Up Wire

In cut lengths for immediate use in building sets. Made of tinned square copper. A fast seller.

Belden Manufacturing Company

Electrical Wire, Cable and Cordage

2306 S. Western Ave., Chicago, Ill.

Eastern Office and Warehouse, Newark, N. J.



Tuned Transformer Coil No. 14

SICKLES DIAMOND-WEAVE COILS

Patented August 21, 1923

COIL HEADQUARTERS

Sickles Diamond Weave Coils are recognized as standard equipment where extreme selectivity is required. They are being specified more and more by the manufacturer who incorporates in the sets which he builds the most efficient parts he can secure.

Among the leading Sickles Coils are the Tuned Transformer Coil for any Tuned Radio Frequency Circuit and the Knockout Reflex Coil for the famous Radio Broadcast Knockout Circuit. There are Coupler and Oscillator Coils and Acme Reflex Tuning Coils.

In addition to these standard coils, we are equipped to furnish special coils for special requirements. Secure maximum efficiency in your sets by including Sickles Diamond Weave Coils for selectivity.

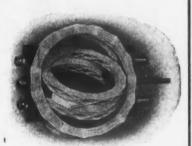
Send for descriptive catalog.

THE F. W. SICKLES CO.

341 Worthington St. SPRINGFIELD, MASS.



Knockout Reflex Coil No. 8 Price \$4.00 a Set



Diamond Weave Variometer No. 12 Price \$4.50



Diamond Weave Variocoupler No. 11 Price \$4.50



This name

Westwyre Variable Condensers

is your bond



We have never yet failed to back our merchandise, and those merchants who are "selectors" of goods as well as rapid turn-over men are the type we seek.

Write us

THE WESTWYRE COMPANY
Westfield, Mass.

Westwyre Irons \$1.50 to \$2.50



Make Your Radio Investment work faster

Put this case on your counter regardless of the size of your radio department.



Here's the assortment of Radio Wire Fittings that profitably fits in with all Radio stocks. This assortment was developed thru our complete knowledge of consumer requirements. It's a "balanced assortment," all fittings selling equally fast. The profit from one case is really big—yet the fittings are popularly priced.

These are the same fittings being used by large Radio Manufacturers. The design and quality in each instance has been proven exceptionally good. Get this case working for you—sell several in the time it takes to get rid of one ordinary terminal assortment.

"ORDER FROM YOUR JOBBER"

H. B. Sherman Mfg. Co. Battle Creek, Mich.



Our newest and best radio antenna wire

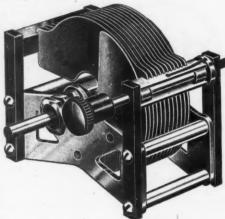
Braided Flat Ribbon

Contains over one-half mile of wire strands to each 100 ft. coil. For outdoor or indoor use. In Copper—Tinned Copper—Enameled Copper.

We also make round antenna wires in all types and metals. Loop wires, Litz wires, Cotton covered wires. Ask your jobber for R.A.CO. Wire.

ROSS ANTENNA CO.
9 Charles St., PROVIDENCE, R. I.

HICO THE NEW SEXTON CONDENSER



The Cam Vernier on Stator Plates does it

A NEW and exclusive principle of control that allows minutest adjustment.

A low loss condenser that will work in any circuit. Five Engineers designed this condenser incorporating the latest up to the minute features of condenser construction.

11 plate .00025 mfd. . . . \$4.50 Reta 17 plate .00038 mfd. . . . 4.75 Reta 23 plate .0005 mfd. . . . 5.00 Reta

Send for samples and discounts.

HARTFORD INSTRUMENT CO. 305 Pearl St., Hartford, Conn.

Why It Is Better

HE picture tells the story—seven practical, sensible reasons why Federal sockets should be in your "pet" hook-up.

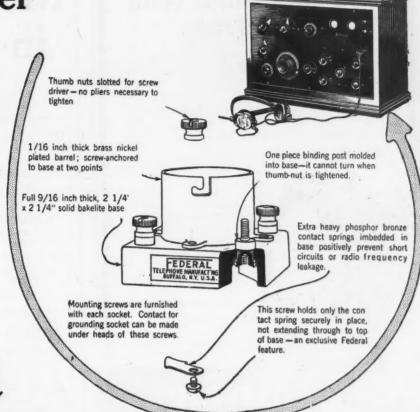
Federal sockets are but another evidence of the care and engineering skill used in designing and making Federal Standard Radio Parts. There are over 130 standard parts bearing the Federal ironclad performance guaranteetheir use means—"Balanced Circuits" with better performance.

FEDERAL TELEPHONE & TELEGRAPH CO.

Buffalo, N. Y.

Boston New York Philadelphia Chicago Pittsburgh San Francisco Bridgeburg, Canada









A Recognized Innovation | and Sales Talking Point

New One-Piece Stator

Manufacturers, Jobbers, Dealers and Public recognize the value of this EX-CLUSIVE and UNIQUE FEATURE. Another step forward in perfection of variable condenser construction. Profit by being in position to supply a new demand.

A one piece stamping eliminates broken contacts, soldered joints and stator resistance

Featured in types 3 (plain) and 4 (all-vernier), Celoron End Plates; types 5 (plain) and 6 (all-vernier), Metal End Plates.

CS and CV Low Price Types always in stock.

100% GUARANTEED

These new features place U. S. Tool Condensers far in the van. National advertising in newspapers and leading periodicals will bring inquiries to you. Better get the complete story!

WRITE FOR FOLDER!

U. S. TOOL COMPANY, INC. 109 Mechanic St., Newark, N. J.

Mfrs. of special tools, dies, jigs, automatic machinery and sub presses.

You Can Build With AmerTran

AmerTrans are designed to cause tubes to deliver the utmost in volume, clarity and tone quality—and they do it.

AmerTran, in addition to being electrically efficient, is a unit worthy of the support of the radio dealer, for when you sell AmerTran you sell audio satisfaction.

Sell them by the

AmerTran is made in two types—one quality —Type AF 6 (ratio 5) Type AF 7 (ratio 3½). List either Model \$7.00 —discount regular.

> American Transformer Company

Newark, N. J.

"Transformer builders for over twenty-three years."

AMERTRAN

More profit in spaghetti

You will sell a lot more spaghetti by hanging this handy container in a prominent place. It will save shelf room and keep your stock clean. It will remind fans that they want spaghetti and tempt them to take some home to keep on hand. The carton holds 100 pieces.

ALPHA is better spaghetti, too. It is well known and guaranteed. We back it with real selling aid.

WRITE US A POST CARD for this attractive proposition! Get the Alpha container and let it sell more spaghetti for you!

Manufacturers of sets and parts, write for prices on Alpha "SPECIAL" in bulk.

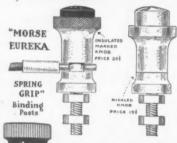
We Also Cut and Straighten Bus-Wire

A L P H A

613 Broadway, New York City



Morse Gureka Spring Grip Binding Posts
The King of all Posts





DIRECTIONS POR USE
MOLD BUTTON WITH THUMB RESISTANCE.
DRAW BRASS BODY OUT WITH TWO PINGERS,
THEN INGERT CORD TIP AND RELEASE WHEN TIP OR CORD 15 GRIPPED TIGHT

"MORSE" Non-Removable Knob Binding Posts

Made plain or with twenty

different markings
These Posts are the best made. The letters are large enough to be read easily, and Both Styles are made

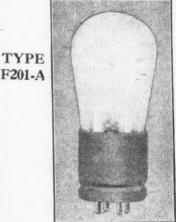




FRANK W. MORSE CO., Boston, Mass.

A better deal for you, and 100% satisfaction for your

customers-



"FEDERAL"
GUARANTEED
LIST PRICE

The Federal Tube, through its vastly improved and guaranteed filament, achieves a clarity of tone unequalled in any other. Non-michrophonic, of very rigid construction, and notable for its extremely long life.

You will welcome this real tube. Well made by experienced engineers, and soundly backed. You can give your trade a real deal at last.

Generous discounts. Order through your jobber, or direct.

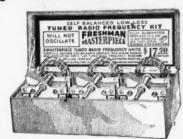
THE SERVICE LAMP CO.

112 Trinity Place, New York City





TUNED RADIO \$17.50 FREQUENCY KIT



EASY TO BUILD—EASY TO SELL

With the Freshman Masterpiece Kit any one can easily build a five tube radio frequency receiver that will bring in even the most distant stations, with the volume and clarity of locals.

NO NEUTRALIZING OR BALANCING CONDENSERS REQUIRED

Kit consists of 3 Masterpiece Tuned Radio Frequency Units carefully matched and balanced. Complete with wiring diagram and instructions, and drilling template for proper mounting.

No radio stock is complete without Freshman Masterpiece Kits. At \$17.50 list they are good profitmakers for you because they sell quickly and easily. Write for catalog today.

Chas. Freshman Co. Inc.

Radio Gondenser Products

106 SEVENTH AVE.

NEW YORK





9800



\$28500

- All essential parts of DAY-FAN sets are made in our factory. These sets are not merely an assembly of parts made by others. All parts are designed and manufactured to work in unison and make possible extreme accuracy.
- The appearance of DAY-FAN sets suggests a quality entirely in keeping with their accuracy of manufacture. Made of the finest materials they have a finish and design which harmonize with the surroundings of the most tastefully furnished homes.
- Their volume is such that on many stations it must be dampened for the ordinary room.
- Their selectivity can be varied at will from broad tuning to extreme sharpness.
- Manufacturing accuracy and the use of rivets instead of screws reduce servicing to the lowest point yet obtained in radio manufacturing.

These are a few of the remarkable DAY-FAN qualities. A demonstration will add many more.

**Che DAYTON FAN & MOTOR CO.

**Manufacturers of High-Grade Electrical Apparatus for mars than 35 Years
DAYTON, OHIO.

**DAYTON, OHIO.

Day-Fan





Dealers' Assortments Radio Wire **Terminals**

> (Tinned Copper)

Low investment, diversified stock, forceful to display. Quick to sell-

No. 1 Assortment for larger dealers

Contains 5000 tinned copper terminals, 7 styles-all good selling items.

No. 2 Assortment for smaller dealers

Contains 2750 tinned copper terminals, 6 styles—equally as salable as No. 1 assortment, but small quantities.

Price\$7.50 ea. Price\$5.00

Jobbers-Write for quantity discounts

Manufactured by

PATTON-MacGUYER CO.

Baker Street, Providence, R. I.

Radio and Electrical Mailing Lists

15,369	Radio Dealers Retailper	M.	\$7.50
1,670	Radio Mfgrsper	list	15.00
	Radio Supply Jobbersper		20.00
402	Radio Mfgrs. complete setsper	list	5.00
16,000	Electrical Supply Dealersper	M.	7.50
610	Electrical Supply Dealers (who)per	list	8.50

Can furnish all other Radio and Electrical Lists and all other classifications. Ask for General Price List and Red Book.

A. F. WILLIAMS, Mgr., List Dept.
Trade Circular Addressing Co.
168 W. Adams St., Chicago, Ill.
Established 1880

HERCULES

Attachment Plug

Quick Moving Little Item

Thoroughly made and neatly designed, the Hercules Attachment Plug is as efficient as it is attractive. Moulded from Di-Electric Insulation. Cup-shaped, flanged bushing riveted to end of body. Riveted brass contacts. Lots of space for wiring. Always a steady seller. How is your stock?



Write for samples

Manufacturers of High Grade Electrical and Radio Apparatus

Spec-Dee Specialty Co.

199 Lafayette Street, New York

"-it is easier to sell Pacent Radio Essentials"

PACENT Radio Essentials

Autoplug Baleon
Coil Plug Ri
Coil Plug Ri
Condensors
Butaster Sil
Busplug
Buo-Leteral
Headsets, E

Washington



WITH the market flooded with a great number of nondescript radio parts it pays the retailer who is building for the future, to handle only standard quality parts. You are probably handling one or more of the 30 odd radio sets whose manufacturers have standardized on one or more Pacent Radio Essentials. So when a customer asks for a rheostat, jack, or any other radio essential, show him a Pacent and point to a standard make set that is so equipped. Your sales resistance will dwindle to almost nothing, for a radio fan likes to feel that he is using the same make parts the big fellows are using.

If you are not handling Pacent Radio Essentials your jobber can supply them or get them for you. Make your selection from our complete catalog—mailed to you upon request.

THE PACENT ELECTRIC COMPANY, Inc.

91 Seventh Avenue, New York City

Jacksonville Buffalo

PACCI

DON'T IMPROVISE - PACENTIZE |

Priced at \$500

For Bigger Sales

THEN the AMPL-TONE Guaranteed Radio Headset was first brought out three years ago, the price was very much higher because we did not foresee such a sweeping demand.

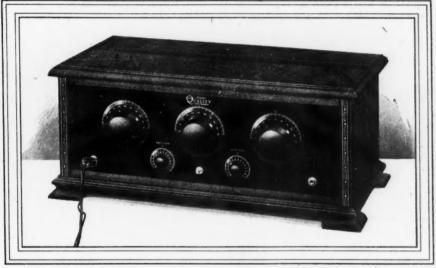
Our costs have permitted us to lower the price to \$5, also improving the set, thus passing on to the trade an advantage that spells TURNOVER! We believe this is the lowest price ever on an instrument with such outstanding merits.



Full 2200 Ohms

For loud, clear, equalized tone, we have found no equal to the AMPL-TONE to the AMPL-IONE
Headset selling at a
price a nywhere
within the popular
range. We use only
the best materials. The head set has been tested, tried and proven

ONE GUARANTEED HEADSETS





AT LAST A SET THAT SATISFIES EXACTING PEOPLE

SATISFIES the quality ear—the ear that demands true musical tone, clear, rich, natural. Satisfies the quality eye—the eye that demands beauty of cabinet making, beauty of line and color. Satis-

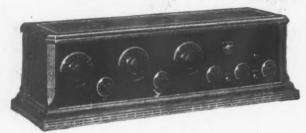
fies the quality mind—the mind that demands perfection in electrical design, construction and results. A set absolutely unique in the radio field. Write for the new Starr Quality Merchandising Plan. MODEL D, the newest Starr Quality Model. Ecquisitely designed case of matched, quarter, burled valuat with carved base and inlaid pilasters. Employs the sensational new, non-radiating Starr Harmonic Circuit, distinguished for selectivity, long range and amazing CLEARNESS. Standard amazny CLEARNESS. Standard panel arrangement. B batteries en-closed, all wiring concealed. Retail list \$150. Picture does not do justice to this case. Sample on application.

STARR EQUIPMENT CORP. 370 Hamilton Avenue Brooklyn, N. Y.



WATCH FOR THE NEW STARR QUALITY CONSOLE MODEL

The HOWARD 5-tube **NEUTRODYNE**



See This Set Perform-

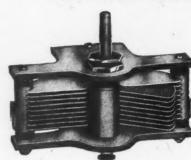
Day in and day out, summer and winter, Howard Neutrodyne will give the pleasure and perfect performance that keeps customers satisfied.

> Write for Discounts and Folders Howard Radio Company, Inc. 451-469 East Ohio St., Chicago, Ill.



The NOL-LOS

A condenser achievement



Capacity .0005 Capacity .00035 Capacity .00025

You said somebody would do it-SO WE DID!!!

The NOL-LOS Condenser is being talked about. No product of such obvious merit can remain unknown. Exaggeration is not needed to sell it.

Recently tested in one of the great laboratories in the world (name on request), the NOL-LOS proved exactly equal in resistance in ohms to the standard condenser used in that laboratory, namely 1.0 ohms.

Jobbers and dealers write for literature and discounts.

B. GROSSER SONS CO., Inc.

Manufacturers 51-55 Sudbury St., Boston, Mass.

This way to better business

The Co-OP Plan

means you buy

right buy wisely,

buy profitably.

Get your copy of

a net price Bargain Book listing 3000 high grade Things Electrical, including Radio. Use your letterhead.

Co-OP Monthly

Buy Electrical Appliances, Lighting Supplies and Radio direct by mail.

We sell only first class, guaranteed merchandise. All live Dealers should use our service. Wholesale only.

Make this your headquarters for buying Xmas stocks "Speed Service". Co-Operative Electrical Supply House 120 North Union Street Chicago, Illinois

Write us, mention your Jobber's name and we will send you FREE, without obligation, a No. 22 Ajax Plural



and complete price sheets on Electrical and Radio Specialties

If our goods and prices suit you—order from your Jobber at our New Discounts. Our Socket Pluss are Guaranteed against all damage from heat, moisture and breakage. Approved by Good Housekeeping and Modern Priscilla testing laboratories.

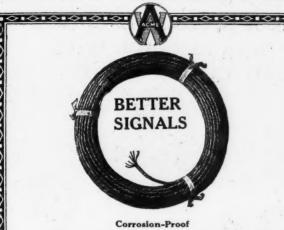
Ajax Electric Specialty Co. 1926 Chestnut St., ST. LOUIS, MO.





Chapman Manufacturing Co., Terryville, Conn.

Only reliable products can be continuously advertised



Stranded Enameled Antenna

It offers a greater receiving area (or "skin surface") to the incoming wave than a single strand. Corrosion hinders the weak high frequency currents. The enamel coating prevents corrosion. This increases the range of reception. Write for discounts and folder.

ACME WIRE Make Bette Sets

Acme Wire Co., Dept. E., New Haven, Conn.



Manufacturers:

DID YOU KNOW that one magazine now reaches all retailers and wholesalers of radio sets and accessories?

It's "Radio Retailing"

-a McGraw-Hill Publication.

471 Tenth Avenue, New York City

Brand New

Here, at last, is an inexpensive fuse that is guaranteed to protect radio tubes from blowing out due to short circuits.

Think of the money these fuses will save! A large percentage of the 4,000,000 or more radio set owners will surely want one when they read our strong, persuasive advertisements pointing out how they can protect their tubes by installing the

"GEM" Radio Fuse

We are going to spend thousands of dollars to advertise the Gem Radio Fuse in leading radio magazines and in other ways. This will not be a fly-by-night campaign—but a steady hammering at your customers month after month. You are certain to receive scores of calls for the "Gem" Radio Fuse as soon as it is

Advertised Nationally

Put in a small stock now and be ready to make the nice profit you will otherwise lose.

We have spent hundreds of thousands of dollars advertising our "Union" Renewable and Non-Renewable Fuses during the past 35 years. So every fuse owner knows that we make good, dependable fuses. That will make it easier to sell "Gem" Radio Fuses.

Order from your jobber. If he hasn't put in his stock, give us his name and we will see that you are supplied.

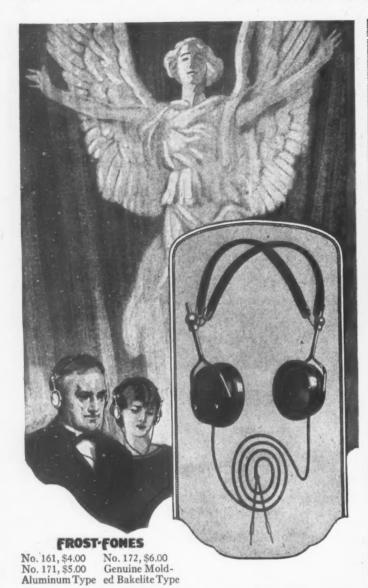
Write for interesting booklet.

CHICAGO FUSE MEG. CO.

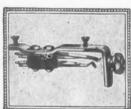
ELECTRICAL PROTECTING MATERIALS
AND CONDUIT FITTINGS

CHICAGO

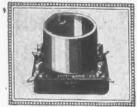




Summon the Spirit of Radio



unlike any other jacks, erves as bracket for panel-sembly. All types, 700 to \$1.00 list



FROST-RADIO SOCKET List Price, 650

HE miracle of radio is the Cability of the listener in to heed the call of the distant voice. **FROST-FONES** bring in DX as well as local programs with remarkable fidelity. They reproduce every tone and note of vocal or instrumental concerts. More than a million users have found them ideal for quality, dependability and clearness.

There are many products in the line of FROST-RADIO which your store can carry with profit to yourself and the greatest satisfaction to your customers. Get in touch with your jobber today.

HERBERT H. FROST, Inc. 154 WEST LAKE STREET, CHICAGO, ILLINOIS. NEW YORK CITY CLEVELAND KANSAS CITY LOS ANGELES HERBERT

Get perfect reception and distance with HOWARD RADIO PARTS

The standard Howard rheostat, with single hole mounting and DIAL. Made in 6½-25-40 and 60 ohms resistance.

Price \$1.10



Here is the Howard Low Loss socket with the "sure side contact". A high grade product that is sure to be a fast seller in any radio stock.

List \$1.25



Above is shown an unusual development in Micrometer rheostate on struction. meter rheostate on struction.
Single hole mounting with Dial.
Has instantaneous "single-knob" control. You'll want this one in stock because there is great demand for it. List \$1.50

Be sure you are thoroughly informed on Howard. Write today for com-plete details and discounts.

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HOWARD RADIO CO., INC. 451-469 East Ohio St., Chicago, Ill.



Save-a-Life Lite—at \$5

First in New York at Wanamaker's THEY GUARANTEE IT

It is the new automobile warning light adopted by the Police Depts. of New York and leading cities of U. S. and Canada, as shown by the photograph above. (Civilian Model.)

Attached to the back of the driver's left hand, it flashes a red and white warning beam to oncoming cars when the hand is held out in the usual way to indicate "stop" or "turn." Inside the car the light stays out.

It is automatic and positive.

Operating by gravity, which has never yet gone out of

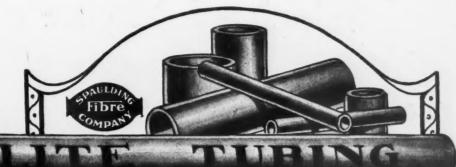
It abolishes the false sense of security engendered by an invisible warning light

> A profitable proposition for dealers! Write

SAVE-A-LIFE LITE, Inc. 5 Columbus Circle, NEW YORK CITY

Prompt Shipments From Conveniently Located Warehouses

With warehouses conveniently located on the Atlantic and Pacific Coasts and Mid-Continent, shipments can be made promptly in any quantity. Address nearest office.





Specially Processed for Radio Coils

Supplied in all diameters. Shipped in standard 36-inch lengths to the jobbing trade and cut to length in accordance with manufacturers' own specifica-

Spaulding-Bakelite tubing for coils of every description is an assurance of supreme service-

of the same dependable quality of manufacture characterizing all Spaulding products.

Highest in dielectric properties -does not absorb moisture-insures low leakage-low distributive capacity-low resistancedoes not laminate.

SPAULDING FIBRE COMPANY, Inc., Tonawanda, N. Y.
Factory—Tonawanda, N. Y.
Offices—Warchouses

484 Broome St., N. Y. City 141 N. 4th St., Phila. 659 W. Lake St., Chicago 15 Elkins St., Boston 509 First Nat'l Bank Bldg., Milwa

Just in time for CHRISTMAS-

and the most profitable part of your Christmas trade!

That splendid voice of the Audiophone is now available in the fine cabinet model illustrated here. It has that full, round tone quality so admired in our Model "S" horn-type loud speaker, but its square design actually gives to its voice a sweetness entirely its own.

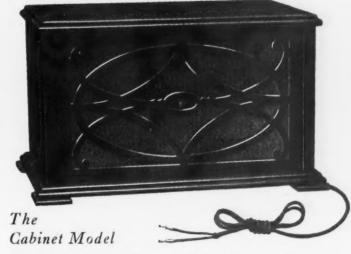
The cabinet is of genuine mahogany.

The Audiophone is not a phone unit fitted to a horn. It has a diaphragm of aluminum alloy, the best vibrating material ever developed.

With its tone arm held in place magnetically, it can never wear or chatter. And there is an adjustment giving complete control of the tone.

The result is an instrument which reproduces with natural quality in powerful tones, and has a sensitiveness equal to any loud speaker developed.

The price too—\$30—is bound to score a distinct hit. Only \$5 difference between this fine cabinet model and our horn type Model "S"!



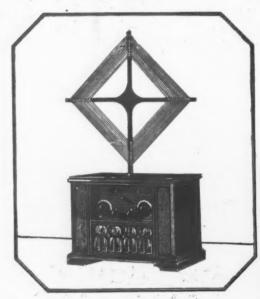
BRISTOL Audiophone

See your radio distributor, or write us direct.

THE BRISTOL COMPANY, Waterbury, Conn.

Which would your customers rather buy?

This?—



"WITHOUT ACCESSORIES"

Radio instrument Antenna wire Connection wires Clips Lightning arrester Insulators

Loud speaker Window lead in Mechanic's labor Storage battery Nails
"B" batteries Screws
Tubes Staples Or each of these items, plus your



or this?

In the De Forest D-12 you sell a complete unit

SOME of your customers think it is fun to hook up a radio set, to string antenna from tree to house, to connect ground-wire. At least it is fun if they are mechanically minded.

If they are not, and want an instrument which is ready to operate when they buy it and which is based on the highest kind of engineering skill, what they want is a De Forest Radiophone.

No need for a customer to ask "How many extras must I buy?" or "How much more will accessories cost?" when you show him a De Forest.

With a De Forest you sell every needed accessory. Your customer wastes no time in buying; you waste no valuable time or effort in selling parts, batteries, wire, etc. And because he buys the De Forest as a self-contained, complete unit, your customer can use it as soon as you install it in his home. Your work is quickly done. Your

customer will be pleased with your service.

The De Forest Radiophone is based on the highest engineering skill. It is an instrument that the owner can use—and be proud to demonstrate to his friends. It is the leader in the field and has a clear, natural tone almost beyond belief—and it is remarkably selective.

The De Forest D-12 is easily movable from room to room. It doesn't need either antenna or ground connections, or attachment to outside batteries. The D-12 is an instrument whose self-contained qualities and performance will appeal to thousands of prospective customers of yours. And it stamps you as a merchant ever on the alert to give your customers the best possible service.

There is still an opportunity for a few responsible, progressive merchants to become De Forest agents and build a greater business by selling De Forest instruments and parts. Write to us today for full information.

DE FOREST RADIO COMPANY, Jersey City, N. J. Also makers of De Forest Tubes—the "Magic Lamp" of Radio

DE FOREST RADIOPHONE



The 4-inch K-E diaphragm is in size and weight especially designed for heavy loud speaker currents. Reproduction from this diaphragm is unusually mellow and clear, and loud.



The 2%-inch diaphragm which gives clear reproduction in a headphone is bound to rattle, blast and distort with the heavy currents necessary for loud speaker work Yet headphone diaphragms are still used in most loud speakers.

Full volume—yet crystal clear!

K-E builds up volume naturally instead of forcing the tone!

Caruso's marvelous singing swayed millions—and his voice lives after he is gone.

No one ever attempts to lay Caruso's greatness to the shape of his mouth. His remarkable *vocal chords*, though, will still be discussed in music circles generations from now.

The diaphragm—the "vocal chord"—of the loud speaker produces tone.

It took our engineers sixteen months to perfect the diaphragm of the K-E.

There lies the "secret" of such purity in tone—the faithfulness with which the K-E re-creates.

See your jobber or write us direct for literature on this unusual speaker.

We shall be glad to send you a K-E to test at the special introductory price of \$11.70 (List \$18).

KIRKMAN ENGINEERING CORP.

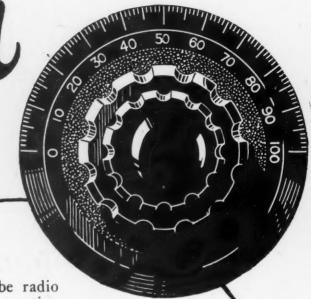
Established 1912

484-490 BROOME STREET, NEW YORK
Makers of K-E Fuses









AT LAST! here it is-the MOHAWK five tube radio frequency receiver which will give coast to coast reception and cover the entire range of radio broadcasting wave lengths—with just ONE Dial to tune.

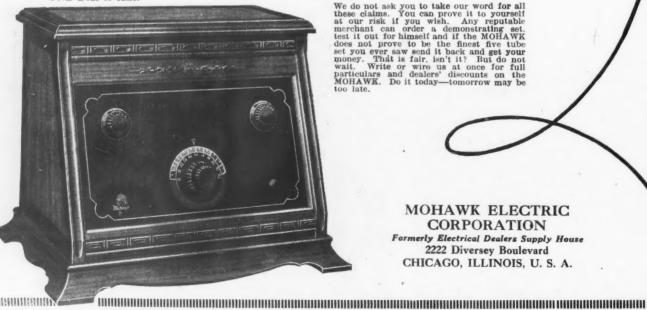
The Mohawi FIVE-TUBE RECEIVER

This decidedly different MOHAWK Receiver with its ONE DIAL control will do anything any other five tube set will do-and do it easier, quicker and better. The super-sharp tuning of the single high ratio Vernier Dial on the Mohawk and its compact construction make it a marvel of selectivity. Just ONE Dial to turn and as you turn it you tune in station after station.

It has a record of 43 stations in one hour-and we can prove it. It cuts out the local stations with ease and brings in the distant ones with unusual volume and without the least particle of distortion. It is a beautiful set-beautifully made and a short half hour's demonstration will convince you that its performance is truly

We Want Dealers Everywhere

If you are looking for the selling agency on a Radio set which will meet and beat all competitive outfits on the market—if you are looking for a set that will attract the radio buyers to your store and bring you big, quick profitable sales—here it is. The new MOHAWK with just



We do not ask you to take our word for all these claims. You can prove it to yourself at our risk if you wish. Any reputable merchant can order a demonstrating set, test it out for himself and if the MOHAWK does not prove to be the finest five tube set you ever saw send it back and get your money. That is fair, isn't it? But do not wait. Write or wire us at once for full particulars and dealers' discounts on the MOHAWK. Do it today—tomorrow may be too late.

MOHAWK ELECTRIC CORPORATION

Formerly Electrical Dealers Supply House 2222 Diversey Boulevard CHICAGO, ILLINOIS, U. S. A.

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In campa FADA the le tising It loc to the

maga and 7

Tie will fi paper of roo Christi dealers Write Neutro

1581 JE



Advertising that helps YOU sell FADA receivers

YOU have seen the striking full-page FADA advertisements in The Saturday Evening Post month after month. Look for the issues of December 6th and December 20th. The December 6th issue carries a big two-page smash in colors that will create interest and boost holiday sales of FADA Neutrodyne receivers. On December 20th, just when Christmas sales are heaviest, purchasers are again reminded to buy a FADA Neutroceiver or FADA Neutrola. This Saturday Evening Post advertising is supplemented by pages in all the leading radio magazines, by pages in The Literary Digest and The American Magazine.

In addition to one of the largest magazine campaigns ever conducted for radio receivers, FADA is using newspaper space generously in the leading radio centers. Some of this advertising is reproduced above—greatly reduced. It localizes FADA sales and brings customers to the stores selling FADA receivers.

Tie up with this FADA advertising. We will furnish mats or electros of FADA newspaper copy in 12 and 28½ inch space, with plenty of room for your own name. Use it before Christmas. This material is supplied free to dealers who agree to run it in their local papers. Write for further information about FADA Neutrodyne receivers and FADA advertising.

F. A. D. ANDREA, INC.

1581 JEROME AVENUE NEW YORK



To know how any set will sell for you See how it sells where sales are hardest

No. 1 The Monotrol Rode Roughshod series Over Radio Traditions in—

New England is one of the hardest markets in the country in which to sell radio. No other section of the United States has such peculiar "local conditions" with such strange variations in reception. And no other radio set in America has been able to cut through these obstacles so surely, so sharply and with such surprising power as—

The New

Steeper

Reg. U. S. Pat. Off

THE MOST-PERFECT RADIO SET



NVERSE DUPLEX bosures Neveral Tone Quality

Instances of weird reception in New England are almost without number. There is the Naugatuck Valley of Connecticut—noted for its "whispering" voices that come faint and ghostlike from even the most powerful of stations.

There is Lawrence, Mass., from which few sets can bring in even the Boston stations with a satisfactory volume and which, in consequence, has proved a Waterloo for many sets that worked well elsewhere. There is Hartford, which for a long time could hardly hear Springfield and Springfield which cannot penetrate the barrage of its own local station.

NEW ENGL

The Sleeper Monotrol, however, has tremendous reserve power—a power overcoming obstacles that baffle sets of many other types. Riding roughshod over local radio traditions, the Monotrol has fairly taken New England by storm. For instance:

SPRINGFIELD, MASS.—Our New England States distributors tell us that few other sets in Springfield have heretofore been able to tune through WBZ successfully. Then came the Monotrol. A test was conducted with WBZ operating and the Monotrol brought in Mexico City without interference. Then, turning to the northward, they caught Montreal with perfect separation and but slight difference in wave length.

LAWRENCE, MASS.—Loud speaker reception of Boston, New York and distant stations on the Monotrol election night when hardly another loud speaker was working in Lawrence.

PORTLAND, ME.—The Monotrol, but recently introduced to Portland, has already been purchased by 35 of the most prominent citizens who declare it to be the most successful set operating in that city.

HARTFORD, CONN.—The Monotrol brings in dozens of stations that many sets of otherwise excellent reputations do not hear.

The new Sleeper Monotrol has broken down the local radio traditions in all sections of the country. Let us show you how it can solve your OWN most aggravating problems. Write for name of nearest distributor together with our sales aid plan, book and the manual—"How to Sell a Radio."

SLEEPER RADIO CORPORATION

430 Washington Ave., Long Island City, N. Y.

CHICAGO 10 South La Salle St. SAN FRANCISCO 111 New Montgomery St.







No. 122 **Duolet**



No. 77

Dealers everywhere report big sales. The Piedmont Electric and Hdwe. Co., Oakland, Cal., says: "We have already ordered over \$200 worth of Benjamin Two-Ways assorted in the last two months."

There is still another chance to cash in big on Christmas Sales of Benjamin Two-Way Plugs and other appliances and win one of the fine merchandising prizes in the

Benjamin Two-Way Plug Prize Window Contest

Every dealer is eligible. Send now for your Christmas Window Trim. It will help you make December the biggest month of the year in sales of Benjamin Two-Way Plugs and other appliances.

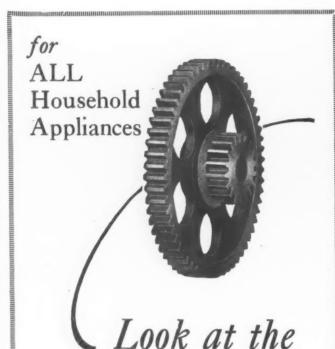
Benjamin Electric Mfg. Co.

120-128 So. Sangamon St., Chicago

247 W. 17th St., New York

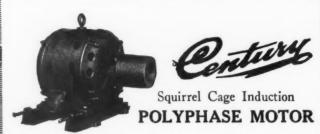
448 Bryant St., San Francisco

BENJAMIN Makers of Things More Useful



Perkins Appliance Co. 4 Birnie Avenue, Springfield, Mass.

Gears!



The 30 H.P. Motor

Bearings are built of the best grade cast phosphor bronze and are of a size to give years of uninterrupted service. To further insure a long life to the bearings, the bearing housings and oil wells are made as near dust-proof as it is possible to build.

Write for folder No. 535.

1/6 to 75 H.P.

Century Electric Company

General Offices: 1827 Pine Street ST. LOUIS, MO., U. S. A.

Sales Offices and Stocks in Principal Cities



WRITE FOR

Bulletin M. S. 25 just off the press.

New Features Latest Developments

Penn Electrical & Mfg. Co.

Main Office and Works Irwin, Pa.

BRANCHES: 418 Real Estate Trust Bidg., Philadelphia; 113 E. Franklin St., Baltimore; 48 E. 41st St., New York City

STERLING ELECTRIC SIREN

An Excellent Work 10 Emergency Signal \$35.00



Gives a Sound Which Compels Attention \$35.00

Write for Discount Inter-State Machine Products Co., Inc. 70 Allen Street, Rochester, New York



Toy Electric

They give boys a chance for creative thought. Put these motors in your window now and not only get people into your store but make sales.

LIBERAL DISCOUNTS TO DEALERS

KENDRICK & DAVIS CO.

LEBANON, NEW HAMPSHIRE





PAT.
APPLIED
FOR

One twist and its on to stay. No screws. Simplest, safest and quickest. A perfect connection. Positive insulation. Approved everywhere.



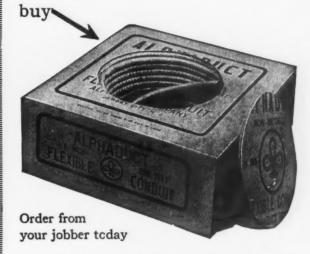
WEISS & BIHELLER, INC.

Importers of Lighting Glassware,

Fixture Parts, Etc.
584 Broadway, New York City
Canadian Office—69 Adelaide St., E. Toronto

Don't Duck

When you need DUCT.



ALPHADUCT COMPANY 136 Cator Ave., Jersey City, N. J.

The name of a product best suited for Electric Heating Appliances.



We make clay specialties, plain and threaded tubes, Refractory Porcelain for Electric Heating Appliances.

" PORCELAVA " makes the best Pyrometer Insulation.



BURGESS & COMPANY

EAST LIVERPOOL, OHIO

Factory at Wellsville, Ohio



reliable!

Reliability in terms of Ohio fractional horsepower Motors is easily defined by this fact: "Of the thousands of Ohio Motors shipped each year, less than 1% have needed expert attention due to motor defects."

Such a performance record, year in and year out, is not a mere accident. It is the realization of the ideal of an organization that has been associated with the design and production of fractional horsepower motors for more than a quarter century.

That such Motor Reliability is vital to the reliable performance of the device or appliance you manufacture and sell is beyond question.

Tell us your Motor needs!

THE OHIO ELECTRIC & CONTROLLER CO.

5901 Maurice Avenue

Cleveland, Ohio

SEARCHLIGHT SECTION

SURPLUS STOCKS—BUSINESS OPPORTUNITIES

UNDISPLAYED-RATE PER WORD:

Fostions Wanted, 6 cents a word, minimum \$1.25 an insertion, payable in advance.

Postions Vacant and all other classifications, 10 cents a word, minimum charge \$2.00.

Proposals, 40 cents a line an insertion.

INFORMATION:

Box Numbers in care of any of our offices count 10 words additional in undisplayed ads.

Discount of 10% if one payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals).

Electrical Merchandising

POSITIONS VACANT

AN experienced Central Station merchandiser wanted to take charge of the Central Station business of an electric appliance manufacturer. Man must be capable of cultivating the directing heads of central stations and also of doing constructive work in the field with the local managers and sales forces. In reply please state your age, experience, present connection, salary desired and be assured that all returns will be held in strictest confidence. P-767, Elec. Merch., Old Colony Bldg., Chicago, Ill.

SALESMEN WANTED

Eastern Gas and Electric Company supplying a large territory desires to secure the services of several experienced gas and electric appliance salesmen as well as men to solicit housewiring contracts. The sales force of this organization is conducted on an all-year basis and offers a wonderful opportunity for advancement to men with the proper experience. SW-761, Elec. Merch., 10th Ave. at 36th St., New York.

Sideline

Salesman wanted by manufacturer of electrical specialties to carry side line in South and Southwest. Fine opportunity. One who calls on dealers. SW-769, Elec. Merch., 10th Ave. at 36th St., New York.

Manufacturer of Well-Known Line

of electrical specialties desires salesmen to cover jobber and dealer trade in and around the Chicago territory, and also man for New Orleans and surrounding territory. SW-768, Elec. Merch., 10th Ave. at 36th St., New York.

SALESMEN AVAILABLE

SALESMAN. Would like to represent some electrical appliances concern in Philadelphia and vicinities. SA-762, Elec. Merch., Real Estate Trust Bldg., Phila., Pa.

Pa.

TO represent a manufacturer in the East, salesman recently averaging \$200,000 to \$300,000 for well-known manufacturer, selling to electrical distributors, jobbers, contractors and dealers, acquainted with the electrical trade all along the Atlantic Coast, and familiar with merchandising methods, desires to make a connection as district sales manager or sales executive on electrical products marketed through trade channels. SA-770, Elec. Merch., 10th Ave. at 36th St., New York.

REPRESENTATION AVAILABLE

Factory Representatives
Wish to add another line. We cover Illinois,
Wisconsin, Iowa, and Minnesota. Bayard
& Byrnes, 128 N. Wells St., Chicago, Ill.

Manufacturers Representation
of the better kind, available on January 1st.
Acquainted with large jobbers, consulting engineers and public utilities in New
York City and East. RA-772, Electrical
Merchandising, 10th Ave. at 36th St.,
New York.

BUSINESS OPPORTUNITIES

Electricians Contractors
small investment for an up-to-date electrical maintenance system. Will increase your business and ensure revenue the year 'round. Write today for particulars. Trades Maintainance Systems, 94 Stevenson Ave., Pasadena, Calif.

BUSINESS OPPORTUNITIES

Whole or Interest For Sale
in going electrical retail store. BO-771,
Elec. Merch., Leader-News Bldg., Cleveland, Ohio.

Work Wanted

Work Wanted
Electrical and mechanical development and
production; specialists on electric heaters.
Reimers Electric Appliance Company,
New York City, factory, North Bergen,
New Jersey.

Investment

With or Without Services

A southern electrical jobber doing a business of a million dollars annually wishes to communicate with a man having

\$50,000

to invest. Preferred or common stock offered. Available cash discounts alone would assure profitable return on investment. Active service optional.

BO-765, Electrical Merchandising, 10th Ave. at 36th St., New York City

Sales Manager

The United Electric Co. of Canton, Ohio, manufacturers of the OHIO Electric Cleaner—"The Cleaner with the Self-Starter"—has an opening in one of the Metropolitan branches of its New York subsidiary Ohio Electric Co., Inc., for a Retail Sales Manager.

It would be glad to consider applications from men who have made outstanding records in recruiting, training, and managing salesmen selling direct to the consumer.

A basis of remuneration that will be highly satisfactory will be offered the successful applicant.

Address in full confidence giving experience in detail, etc. W. F. Marr, Director of Sales, Box 473, Canton, Ohio.

"SEARCHLIGHT" Service Is for You, Too

T is to help you whenever you have a business want. It insures you, at an extremely small cost, the quickest and most effective delivery of your message to the men in this field who are most likely to be interested in your needs. Try it. Learn what "SEARCHLIGHT" really means to YOU.

Agencies Wanted
Agents Wanted
Auction Notices
Bids Wanted
Books and Periodicals
Buildings For Sale
Business Opportunities
Civil Service Opportunities
Contracts-to-be-let
Contracts Wanted
Deak Room For Rent
Deak Room Wanted
Educational

Employment Agencies
Foreign Business
For Exchange
For Rent
Franchises
Help Wanted
Industrial Sites
Labor Bureaus
Machine Shops
New Industries Wanted
Partners Wanted
Patent Attorneys

Patents For Sale
Plants For Sale
Positions Vacant
Positions Wanted
Property For Sale
Proposals
Receivers' Sales
Representatives Wanted
Salesmen Wanted
Specialties
Sub-Contracts Wanted
Water Front Property
Work Wanted

For Every Business Want
Think "SEARCHLIGHT" First

Laboratory Model Violet Ray \$12.50 Retail



The Bleadon-Dun Company, originators of one-piece Violet Ray Machines, announce their B. D. Laboratory Model. Retailing at \$12.50 it will quickly dominate the field.

the field.

The only quick selling Violet Ray Machine. Get our liberal prices on this machine as well as our complete line retailing from \$8.50 to \$55.00.

We manufacture the most complete line of Violet Ray machines on the market.

Electric Soldering Iron

Besides the advantages of the Spring Handle the thin construction of the new B. D. Electric Soldering Iron makes it particularly adaptable for work in narrow spaces and is therefore, the only soldering iron suitable for radio and telephone switchboard work. Made entirely of copper from accurate dies. The heating element is contained in a unit of one-piece con-struction, eliminating loose tips. Nichrome wire is used in the element. It is wound on, and insulated with high-grade mics. Two-piece plug used. Auxiliary tip may be clamped on any part of the heating element to secure any angle or penetrate any small space for soldering. Heating element guaranteed for

PRICE, \$2.00 RETAIL

The House of Selling Leaders **BLEADON-DUN COMPANY**

213 So. Peoria Street, Chicago

A Shelton at \$1500!



No. 29-Shelton Violet Ray, \$15.00

Big Sales Made It Possible

Sales in such volume as to enable us to revolutionize and then standardize production methods, made it possible for us to bring out this Violet Ray of genuine Shelton quality at such a price.

And more—it is backed by the same profitable proposition as the more elaborate Shelton outfits!

Unquestionably, Shelton offers the biggest opportunity for dealers. Write and let us tell you how!

Shelton Electric Company

16 E. 42d St., New York City

30 E. Randolph St., Chicago



Smilner



Equipped with General Electric motor, strong, compact and powerful. Built to last a lifetime.

The whole construction of the SOUTHERN tends towards ease of operation, thorough cleaning and durability.

Write us for attractive dealer's proposition.

Sells for

Complete with attachments

Southern Electric Company

BALTIMORE

RICHMOND

NORFOLK

Joining wires

Skin the wires a convenient length and clean carefully.



Twist tightly together with pliers.



Cut twisted ends off about half-inch long.



Select an Ideal Connector of the proper size as indicated on end.



Screw on connector just the same as tightening up a binding post. Note how compactly the joints fit in a junc-

the IDEAL

[JASPER PATENT] WAY

Avoids the use of solder and tape and saves a great amount of time. A steel wire spring embedded in the connector screws on the twisted ends of the wires, cutting into the wires just enough to make perfect contact. This also draws the connector down snugly over the insulation, so that it is drawn tightly together, practically sealing the joint against moisture.

By simply unscrewing the connector, the joint is exposed to inspection, without disturbing the circuit, at any time.

Unaffected by heat, non-absorbent, and hard enough to resist crushing by an ordinary blow, Ideal Wire Connectors form the perfect wire joint.



Approved by
Underwriters
Laboratories

Recommended by
National
Electrical Code

EM 12-F-RTG

IDEAL COMMUTATOR DRESSER CO.

1037 Park Ave. Sycamore, Ill.

Send Coupon for Free Sample

IDEAL COMMUTATOR DRESSER CO., 1037 Park Ave., Sycamore, Ill.

Please send me samples of

Ideal Wire Connectors

Name	*********	Position
Company		
2020		



"Circle F"











Only a few more days—

A few more days and the results of Santa Claus visitations will be known.

This will be more of an *Electrical* Christmas than ever before—there's hardly one of you who is dissatisfied with the amount of business that came your way.

—and, don't forget that "CIRCLE F" has played its part in making this an *Electrical* Christmas.

Well—here's a "MERRY One And Many More."

"CIRCLE F" Guaranteed Wiring Devices—Built to Serve a Lifetime

E. H. FREEMAN ELECTRIC Co. TRENTON, N. J.



DISTRICT OF COLUMBIA

National Electrical Supply Co.

1328-1330 NEW YORK AVENUE WASHINGTON, D. C.

Distributors-Jobbers

Electrical Supplies
Radio Supplies
Automobile Accessories
Machinery and Mill Supplies
Established 1870

Good Work Requires Good Material

A few of our reputation builders—
Phillips OK W. P. and Parac R. C. Wires
Trumbull Switches
Belden Cords
Wagner Motors
Duncan Meters and Transformers
Hubbard Hardware and Pierce Specialties



Werehouses:
ASHEVILLE GREENSBORO
NORTH CAROLINA

A Personal Want—

can invariably be filled by a friend.

The Searchlight Section

of this issue covers the current business wants of the industries in which this paper is read.

For Every Business Want "Think SEARCHLIGHT First"

A Business Want—

must be satisfied by someone in your industry.

0134

WHAT AND WHERE TO BUY

Electrical Appliances and Supplies Advertised in This Issue with Names of Manufacturers and Distributors

Readers interested in any articles not listed in these pages are cordially invited to inform us of their wants and every effort will be made to put them in touch with the proper manufacturers.

Readers' Service Department, ELECTRICAL MERCHANDISING, Tenth Ave., and 36th St., New York

Accessories, Cable & Wire A-A Wire Co., Inc. American Brass Co., Indians Rubber & Insulated Wire Co. New York Gas & Elec. Co Sherman Mfg. Co., H. B. Simplex Wire & Cable Co.

Adapters, Vase Lamp Noe & Sons, W. B.

Adapters
Adams-Morgan Co.
Connecticut Mec. & Mfg.
Co.
Curtis Lighting, Inc.
Morse Co., Frank W.
W. R. Noe & Sons
Pacent Electric Co.
Rodale Mfg. Co.

Adjusters, Cord & Lamp McGill Mfg. Co.

Adjusters, Radio Dial Adams-Morgan Co.

Advertising Devices, Electric Flexiume Sign Co. Tork Co., Inc. Save-A-Life Lite Co.

Advertising, Consumer, Magazines and Newspapers for, Coloroto Corp. Good Housekeeping

Agents, Mfrs. (See Jobbers)

Air Compressors, Electric General Electric Co. Alarms, Burglar, Fire, Tank Edwards & Co., Inc. Electric Service Supplies Co. Stanley & Patterson Westinghouse E. & M. Co.

Amplifier & Control Panel Units Atwater Kent Mfg. Co. Bristol Co.

Annunciators

Edwards & Co., Inc.

Stanley & Patterson

Antenna Loop Music Master Corp. Ross Antenna Co.

Arresters, Lightning General Electric Co. Westinghouse E. & M. Co.

Attachment & Cape Hubbell, Inc., Harvey

Automobile Accessories, Electric Benjamin Blec. Mfg. Co. Morse Co., Frank W. Rockbestos Products Corp. Sherman Mfg. Co., H. B. Wakefield Brass Co., F. W.

Batteries, Dry Berry, A. Hall National Carbon Co. Yale Electric Co.

Batteries, Storage Yale Electric Co

Battery-Charging Equipment General Electric Co. Valley Electric Co. Westinghouse E. & M. Co.

Bearings, Ball
Norma Co. of America

Bearings, Motor and Generator Norma Co. of America Westinghouse E. & M. Co.

Sells, Gongs & Buzzers
Edwards & Co., Inc.
Stanley & Patterson

Benches, Vise Martin & Sons, H. P.

Benders, Conduit and Pipe Buffalo Forge Co. Martin & Sons, H. P.

Blowers, Electric Buffalo Forge Co. Latham, E. B.

Blowers, Organ & Forge Clements Mfg. Co.

Books, Electrical & Technical McGraw-Hill Book Co.

Boring Devices
Hykon Mfg. Co.

Bowles, China Macbeth-Evans Glass Co.

Boxes, Floor Nat'l Metal Molding Co. Stanley & Patterson Boxes, Junction and Outlet Benjamin Elec. Mfg. Co. Chicago Fuse Mfg. Co. General Electric Co. Western Electric Co. Westinghouse E. & M. Co.

Boxes, Meter and Service General Electric Co. Square D Co.

Boxes, Paper Consolidated Paper Co.

Boxes, Shipping, Folding Paper, Corrugated, and Fibre Consolidated Paper Co.

Boxes, Switch Chicago Fuse & Mfg. Co. Connecticut Elec. Mfg. Co. Hart & Hegeman Mfg. Co. Johns-Pratt Co. Nat'l Metal Molding Co.

Brass Fixture Parts (See Fixture Parts & Accessories)

Bronzing Lacquers (See Lacquers)

Brushes, Carbon General Mectric Co. Westinghouse E. & M. Co.

Bushings
Koch & Co., Paul W.
Waterbury Mfg. Co.

Buttons and Indicators, Endiant (See Locators)

Buzzers (See Bells & Buzzers)

Cabinets
Benjamin Blec. Mfg. Co.
Jesse Mfg. Co., John O.
National Lamp Wks. of
G. B. Co.
Penn Blec. & Mfg. Co.

Cable, Armored Eastern Tube & Tool Co. General Electric Co. Nat'l Metal Moulding Co. Simplex Wire & Cable Co. Tubular Woven Fabric Co.

Cable Accessories (See Accessories, Wire & Cable)

Candles, Candelabras Elastoid Fibre Co. Fibro Products Co. Guth Co., Edwin F.

Caps (See Plugs, Attachment & Caps)

Caps, Color, Diffusers & Hoods Curtis Lighting, Inc. Rosco Laboratories

Consolidated Paper Co. (Continued on page 196)

GALVIN Motors

Insure UNINTERRUPTED Service and ECONOMICAL Operation



POLYPHASE 1/6 to 1 hp.

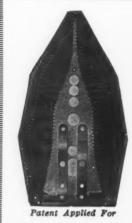
REPULSION INDUCTION 1/6 to 1/2 hp.

DIRECT CURRENT 1/6 and 1/4 hp. SPLIT PHASE

Let us quote you on your 1925 requirements

GALVIN ELECTRIC MFG. CO. 3320 So. Broadway, St. Louis, Mo.

Export Department: 149 Broadway, New York, N. Y.



RENUALL

The Standardized Electric Heating Element for Flat Irons

Here is an item which finds a ready and profitable market because it fills a real need. Fits all the leading makes. Simplifies repair problems and makes satisfied customers. Easy to install. Made in 32 volts, 104-120 volts, 220-240 volts.

Jobbers send for sample element and discounts.

Fits All Leading Irons

OGDEN MFG. CO. 3947 Armitage Ave., Chicago

Sturtevant Electric Motors

Made in fractional sizes from 1/20 to 1/2 horsepower,

D.C. and A.C. Ball Bearing Long Running

Particularly well driving domestic small machinery.



B. F. STURTEVANT COMPANY Hyde Park, Boston, Mass.

The "ACCO" Seal on Every

package



The seal on the package is a pleasant reminder that this chandelier chain is a member of the famous family of "Acco" Chains.

The same service-giving organization that is behind other "Acco" Chain Products assures you that every link of "Acco" Chandelier Chain will make good. For strength, for beauty of form, and finish, it stands head and shoulders above the

Handily packed 10 yds. to a package, which is divided into two lots each containing 5 one-yd. lengths of chain.

"The seal is a symbol of satisfaction."

Werld's Largest Manufacturers of Welded and Weldless Chain and makers of the Famous WEED Automotive Accessories

AMERICAN CHAIN COMPANY, INC.
Bridgeport, Connecticut

District Sales Offices: BOSTON CHICAGO NEW YOU
PHILADELPHIA PITTSBURGH SAN FRANCISC NEW YORK SAN FRANCISCO In Canada: DOMINION CHAIN CO., Ltd., Niagara Falls, Ont.



Radio Manufacturers:

Almost Enough People to Fill Philadelphia

The total circulation of the 69 national trade publications that reach parts of the radio market is 1,012,407, almost enough people to populate a city the size of Philadelphia.

But why pay to circulate your advertising among a million people when one magazine, "Radio Retailing," with a circulation of 45,000, reaches all retailers and wholesalers of radio sets and accessories. The facts are yours for the asking.

Radio Retailing

a McGraw-Hill Publication

473 Tenth Avenue, New York City

Castings, Iron, Brass Waterbury Mfg. Co.

Chain, Fixture American Chain Co. Faries Mig. Co. Wakefield Brass Co., F. W. Waterbury Mig. Co.

Chain, Pull Socket Freeman Elec. Co., E. H.

Chandellers, (See Fixtures Lighting, Rigid)

Choke Coils (See Coils, Choke)

Christmas Tree Lighting Outfits General Electric Co. Haupt, Inc., B. New York Gas & Elec. Co. Propp Co., M.

Cigar Lighter, Electric Electric Heating & Mfg. Co.

Circuit Breakers General Electric Co. Roller-Smith Co. Westinghouse E. & M. Co.

Clamps, Insulator General Electric Co. Westinghouse E. & M. Co.

Cleats
General Electric Co.
Sears, Henry D.
Square D Co.

Clipping Machines Chicago Flexible Shaft Co.

Coils, Armature and Field Westinghouse E. & M. Co.

Colls, Choke
Electric Service Supplies Co.
General Electric Co.
Westinghouse E. & M. Co.

Colls, Tuning
F. W. Sickles & Co.
Thordarson Elec. Mfg. Co.

Color Screens Timberlake & Sons

Celorings, Lamp (See Lamp Dips & Frostings) McKay & Co.

Commutator Stones
Ideal Commutator Dres

Compounds, Soldering General Electric Co.

Condensers, Radio
Adams-Morgan Co.
Andrea, Inc., F. A. D.
Dubilier Condenser & Radio
Co.
Electrical Products Mfg. Co.
Hart & Hegeman Mfg. Co.
Hartford Instrument Co.
Langbein & Kaufman Co.
Liberty Elec. Corp.
National Company
Pacent Electric Co.

Conduit Fittings (See Fittings, Conduit)

Conduit, Flexible
Alphaduct Co.
Eastern Tube & Tool Co.
General Electric Co.
Richards & Co., Geo.
Tubular Woven Fabric Co.
Western Electric Co.

Conduit, Rigid Clifton Mfg. Co. General Electric Co. Nat'l Metal Moulding Co.

Conduit, Surface Nat'l Metal Moulding Co.

Conduit, Underground (Fibre) Western Electric Co.

Connectors, Cord and Lamp Arrow Elec. Co. General Electric Co. Hubbell, Inc., Harvey Morse Co., Frank W. Sherman Mfg. Co., H. B. Waterbury Mfg. Co.

WHAT AND WHERE TO BUY-Continued from page 175

Connecticut Elec. & Mig.
Co.
Ideal Commutator Dresser
Co.
Morse Co., Frank W.
Sherman Mig. Co., H. B.
Stanley & Patterson
Waterbury Mig. Co.
Weiss & Bheller, Inc.
Westinghouse E. & M. Co.
Wirt Co.

Controllers, Motor General Electric Co. Westinghouse E. & M. Co.

Cook Stoves (See Stoves,

Cookers, Fireless Type Excel Electric Co.

Cooking Appliances, Electric Estate Stove Co. Excel Electric Co. Western Electric Co. Westinghouse E. & M. Co.

Cord Connectors (See Con

Cord, Heater
Belden Mfg. Co.
Berry, A. Hall
General Electric Co.
Rockbestos Corp.
Rome Wire Co.
Simplex Elec. Heating Co.
Simplex Wire & Cable Co.

Cord, Lamp Atlantic Ins. Wire & Cable Co.
Belden Mfg. Co.
General Electric Co.
Providence Insulated Wire
Co.
Rome Wire Co.
Simplex Wire & Cable Co.
Tubular Woven Fabric Co.

Current Taps
Anylite Electric Co.
Arrow Elec. Co.
Connecticut Elec. & Mig.
Co. Co. Freeman Electric Co., B. H. Hart & Hegeman Mfg. Co. Hubbell, Inc., Harvey

Cut-Outs
Chicago Fuse Mig. Co.
Connecticut Elec. & Mig.
Co.
General Electric Co.
Hart & Hegeman Mig. Co.
Johns-Pratt Co.
Richards & Co., George
Sears, Henry D.

Decorative Lighting (See Lighting Decorative)

Detectors Adams-Morgan Co. Dials, Knobs and Panels Adams-Morgan Co. Hart & Hegeman Mfg. Co. Yaxley Mfg. Co.

Diffusers (See Caps, Diffusers & Hoods)

Dimmers, Lamp Anylite Electric Co. Berry, A. Hall

Dishwashers, Electric G. R. S. Products, Inc. Hydro Electric Mfg. Co. Western Electric Co.

Distributors (See Jobbers)

Driers, Hair & Hand, Electric Arnold Electric Co. Geier Co., P. A. General Electric Co.

Drills, Portable, Electric Buffalo Forge Co.

Dry Batteries (See Batteries, Dry)

Dynamos General Electric Co. Westinghouse E. & M. Co.

Electric Ranges (See Ranges

Electric Signs
Flexlume Sign Co.
Electro-therapeutic Appl.
Bleadon-Dun Co.

Elements, Heating, for Irons Electric Heating & Mfg. Co.

Ogden Mfg. Co. Rockbestos Corp. Rodale Mfg. Co.

Enamel Zeller Lacquer Mig. Co.

Fans, Ceiling, Adjustable & Non-Ajustable Blades Century Electric Co. Dayton Fan & Motor Co. Emerson Electric Mfg. Co. General Electric Co. Peerless Electric Co. Robbins & Myers Co. Westinghouse Elec. & Mfg. Co.

Fans Desk and Oscillating and Nonoscillating Century Electric Co.
Dayton Fan & Motor Co.
Emerson Electric Mfg. Co.
Galvin Elec. Mfg. Co.
General Electric Co.
Kendrick & Davis Co.
Peerless Electric Co.
Robbins & Myers Co.
Sturtevant Co., B. F.
Western Electric Co.
Westinghouse Elec. & Mfg.
Co.

Fans, Exhaust and Ventilat-Fans, Exhaust and Ventilating
Buffalo Forge Co.
Century Elec. Co.
Cayton Fan & Motor Co.
Emerson Elec. Mfg. Co.
Galvin Elec. Mfg. Co.
General Electric Co.
Peerless Electric Co.
Robbins & Myers Co.
Sturtevant Co., B. F.
Westinghouse Elec. & Mfg.
Co.

Farm Lighting Plants (See Plants, Light, Power)

Filing Equipment
General Fireproofing Co.

Fire Alarm Apparatus Inter-State Machine Products Co. Stanley & Patterson

Fittings, Conduit
Beardslee Chandelier Mfg.
Co.
Crouse-Hinds Co.
General Electric Co.
Guth Co.. Edwin F.
Hart & Hegeman Mfg. Co.
Koch & Co., Paul W.
McLean Mfg. Co.
Moe-Bridges Co.
Nat'l Metal Molding Co.
Wakefield Brass Co.. F. W
Westinghouse E. & M. Co.

Fixture Parts and Accessories Alter & Co., Harry Elastoid Fibre Co. Faries Mfg. Co. Fibro Product Co. Herwig Company Incandescent Supply Co., Incandescalling Inc.
Peerless Light Co.
Sears, Henry D.
Waterbury Mfg. Co.

Fixture Lighting, Adjustable Electric Utilities Mfg. Co. Horn & Brannen Mfg. Co.

Fixtures, Lighting, Bigid
Alter & Co., Harry
American Lighting Products
Co.
Beardslee Chandelier Mig. Co.
Co.
Co.
Curtis Lighting, Inc.
Farles Mfg. Co.
Guth, Edwin F.
Lightolier Co.
Mutual Metal Mfg. Co.
Peerless Light Co.
Pianetlite Co.
The
Richards & Co.
George
Edward N. Riddle Co.
Albert Wahle Co.
Western Electric Co.
Western Electric Co.
Westinghouse E. & M. Co.

Fixtures, Lighting, Show Cases and Windows

For the addresses of the manufacturers listed here, please refer to their advertisements in this issue. The index to advertisers may be found on page 183.

American Lighting Products Co. Beardslee Chandelier Mfg. Beardslee Chandeller Mfg. Co. Co. Curtis Lighting, Inc. Duluth Show Case Co. Frink, Inc., I. P. Herwig Company Horn & Brannen Mfg. Co. Guth, Edwin F. Moe-Bridges Co. Simplex Wire & Cable Co. Timberlake & Sons

Flashlights
Berry, A. Hall
National Carbon Co.
Yale Electric Co.

Flood Lighting (See Projectors) Floor Polishing & Scrubbing New York Gas & Elec. Co.

Fountains, Electric Arnold Electric Co.

Friction Tape
Appleton Rubber Co.
Boston Woven Hose & Rubber Co.
Clitton Mfg. Co.
Western Electric Co.
Westinghouse Elec. & Mfg.
Co.

Fuse Plugs
Chicago Fuse Mfg. Co.
Connecticut Elec. & Mfg. Co.
General Electric Co.
Hart & Hegeman Mfg. Co.
Killark Elec. Mfg. Co.
Sears, Henry D.

Fuse Reducers
Bryant Electric Co.

Fuses, Cartridge, Non-Refiliable
Chicago Fuse Co.
Connecticut Elec. & Mfg.
Co. Co. General Electric Co. Johns-Pratt Co. Killark Elec. Mfg. Co. Westinghouse E. & M. Co.

Fuses, Cartridge, Refiliable Berry, A. Hall Chicago Fuse Co. General Electric Co. Johns-Pratt Co. Killark Elec. Mig. Co. Westinghouse E. & M. Co.

Fuses, High-Voltage Johns-Pratt Co.

Fuses, Plug, Non-Refiliable General Electric Co. Hart & Hegeman Mfg. Co. Killark Elec. Mfg. Co. Sears, Henry D. Westinghouse E. & M. Co.

Fuses, Plug, Refiliable
Hart & Hegeman Mig. Co.
General Electric Co.
Westinghouse E. & M. Co.

Glassware, Lighting Beardslee Chandelier Mfg. Consolidated Lamp & Glass Co. Curtis Lighting, Inc. Gillinder Bros., Inc. Guth Co., Edwin F. Incandescent Supply Co., Incandescent Supply Co., Inc., Macbeth Evans Glass Co. W. R. Noe & Sons Peerless Light Co. Star Glass Co. Westinghouse Elect. & Mfg. Co.

Globes Glass (See Glassware Lighting)

Grills and Table Stoves
Electric
Electranot Appliances, Inc.
Gold Seal Electric Co.
Rock Island Mfg. Co.
Simplex Elec. Heating Co.
Westinghouse E. & M. Co.

Grounding Devices
Sherman Mfg. Co., H. B.
Wagner Elec. Corp.

Hand Driers (See Driers,

Hair Waving Specialties Gold Seal Electric Co.

Hangers, Cable and Conduit Electric Service Supplies Co.

Hangers, Switchbox Wakefield Brass Co., F. W

Headsets, Radio
Brandes, Inc., C.
Electrical Products Mfg. Co.
Federal Tel. & Tel. Co.
Frost, Herbert H.
General Radio Corp.
Hart & Hegeman Mfg. Co.
Radio Corp. of America
Roller-Smith Co.
Stanley & Patterson
Timmons, J. S.

Heater (See Cord, Heater)

Heaters. Radiant, Bowl Type Rock Island Mfg. Co. Rodale Mfg. Co. Rutenber Elec. Co. Scientific Heater Co. Simplex Elec. Heating Co. Westinghouse Elec. & Mfg. Co.

Heaters, Space Strait & Richards

Heating Appliances (See

Heating Appliance Replace-ment Units Electrical Alloy Ogden Mfg. Co.

Heating Devices, Electric Eastern Laboratories, Inc. Electrahot Appliance Co. Elec. Heating & Mig. Co. R. B. Corey Co. General Electric Co. Instant Elect. Water Heater Co. National Electric Water Heater Corp. Security Elec. Mig. Co. National Electric Water Heater Corp. Security Elec. Mfg. Co. Simplex Elec. Heating Co. Strait & Richards Western Electric Co. Westinghouse E. & M. Co.

Heating Pads and Blankets
Berry, A. Hall
Richards & Co., George
Rodale Mfg. Co.
Security Elec. Mfg. Co.
Simplex Elec. Heating Co.
Wolcott Mfg. Co., Frank E.

Holders, Shade Curtis Lighting, Inc. Harvey Hubbell, Inc. Pass & Seymour

Hoods Color (See Caps, Dif-fusers)

Horns and Sirens
Benjamin Elec. Mfg. Co.
General Radio Corp.
Inter-State Machine Co.

Hospital Systems
Bryant Elec. Co.
Kelvinator Sales Corr
Stanley & Patterson.

Ice Making Machines Kelvinator Sales Corp. Indicators, Radiant (See Lo-cators)

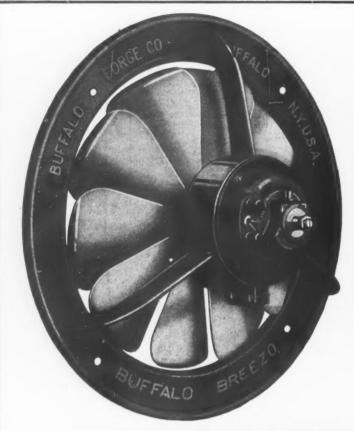
Instruments, Indicating, Test-ing General Radio Corp. General Electric Co. Roller-Smith Co. Westinghouse E. & M. Co.

Insulating Materials
Boston Woven Hose & Rub Insulating Materials
Boston Woven Hose & Rub
ber Co.
Clifton Mfg. Co.
Ellastoid Fibre Co.
Fibro Products Co.
Garfield Mfg. Co.
General Electric Co.
Hoosick Falls Radio Pts.
Mfg. Co.
Westinghouse E. & M. Co.

Insulation, Molded Electric Boston Woven Hose & Rub-Boston Woven Ho ber Co. Garfield Mfg. Co.

insulators
American Insulator Corp.
Garfield Mfg. Co.
General Electric Co.
Sears, Henry D.

(Continued on page 179)



Big profits for you will come from the Breezo

This fan weighs about 1/3 as much as others, is non-breakable, has multiblade quiet-operating wheel, waste-packed bearings that require attention only once in 3000 hours, has totally enclosed motor that requires no attention.

The uses for this fan are found in every industrial plant, garage, and restaurant.

Write for full details.

BUFFALO FORGE COMPANY

180 Mortimer St., Buffalo, N. Y.



Why Dayton Motors give such splendid results

THE real proof of a motor is in the results it

Dayton Fractional Horsepower Motors have been giving satisfaction to users for a great many years. This means that Dayton Motors are made right, that they are as near mechanical perfection as human skill and up-to-date machinery can make them, and that they are built to handle the particular needs for which they are used.

Complete details concerning these motors can be had by filling out and returning the coupon below.



The DAYTON FAN and MOTOR COMPANY Dayton ~ Ohio

Manufacturers of high-grade electrical apparatus for over thirty-five years

The Dayton Fan & Motor Co., Dayton, Ohio

Without obligation, please send me complete details of your Fractional Horsepower Motors.

St. and No.

Insulators, Porcelain Square D Co. Westinghouse E. & M. Co.

roning Machines, Electric Horton Mfg. Co. 1900 Washer Co. Western Electric Co.

Ironing Machines, Gas Heat-ed, Motor Driven Horton Mfg. Co. 1900 Washer Co.

Irens, Curling, Electric
Hietrahot Appliances, Inc.
Gold Seal Elec. Co.
Rock Island Mfg. Co.
Simplex Elec. Heating Co.
Superior Electric Products
Co.
Western The Company Co. Co. Western Electric Co. Westinghouse E. & M. Co. Wolcott Mig. Co., Frank E.

Irons, Electric
Electrahot Appliances, Inc.
Chicago Flexible Shaft Co.
Drake Elec. Wks.
Rock Island Mfg. Co.
Security Elec. Mfg. Co.
Simplex Elec. Heating Co.
Westinghouse E. & M. Co.

irons, Soldering
Bleadon-Dun Co.
Electrahot Appliances, In
General Electric Co.
Hartford Instrument Co.
Simplex Elec. Heating Co.
Superior Electric Produc
Co. o. estinghouse E. & M. Co.

Jobbers
Co-operative Elec. Supply Co.
Latham & Co., E. B.
National Elec. Supply Co.
Newark Elec. Supply Co.
Piedmont Electric Co.
Southern Elec. Co.

Knobs, Porcelain Illinois Elec. Porcelain Co.

Laboratories, Testing Electrical Testing Labora-tories

Lacquers
Zeller Lacquer Mfg. Co.

Lamp Accessories, Incandescent Waterbury Mfg. Co.

Lamp, Dips & Frosting
Egyptian Lacquer Mfg. Co.
McGill Mfg. Co.
McKay & Co.

Lamp Guards & Locks Arrow Electric Co. Benjamin Elec. Mfg. Co. Frink, Inc., I. P. McGill Mfg. Co. Morse Co., Frank W. Pass & Seyman

Lamp Shade Frames, Wire Curtis Lighting, Inc. Timberlake & Sons

Lamps, Automobile Westinghouse Elec. & Mig. Westinghouse Lamp Co.

Lamps Boudoir
Ideal Commutator Dresser
Co.
Electric Utilities Mfg. Co.
Moe-Bridges Co.
W. R. Noe & Sons
Edward N. Riddle Co.
Wirt Co.

Noe & Sons. Wm. R. Albert Wahle Co.

Extension
Berry, A. Hall
Greist Mfs. Co.
Lees Co., K. F.
Stanley & Patterson
Wakefield Brass Co., F. W.
Wilson Utensil Co.
Wirt Co. Lamps, Clamp Attaching and Extension

WHAT AND WHERE TO BUY-Continued from page 177

Curtis Lighting, Inc.
Faries Mfg. Co.
Frink, Inc., I. P.
Greist Mfg. Co.
Co.
Lees Co., K. F.
Moe-Bridges Co.
Edward N. Riddle Co.
Wirt Co.

Lamps, Portable, with Hand Painted Glass Shades Ajax Elec. Specialty Co. Beardslee Chandeller Co. Cassidy Co., Inc. Consolidated Lamp & Glass Co. The Miller Co. Noe & Sons, Wm. R. Riddle Co., Edward N. Wirt Co.

Lamp Guards & Locks Hubbell, Inc., Harvey

Lamps, Incandescent
Consolidated Electric Lamp
Co.
Frink Inc., I. P.
General Electric Co.
Hygrade Lamp Co.
Nat'l Lamps Wks. of G. E.
Nilco Lamp Works
Westinghouse E. & M. Co.
Westinghouse Lamp Co.

Lamps, Miniature, Incandes-cent General Electric Co. Nat'l Lamps Wks. of G. E. Western Electric Co. Westinghouse Lamp Co.

Lamps, Portable
Beardslee Chandelier Mfg.
Co.
Best Lamp Co., H. A.
Consolidated Lamp & Consolidated Lamp & Glass Co.
Curtis Lighting, Inc.
Electric Utilities Mfg. Co.
Faries Mfg. Co.
Less Co., K. F.
Moe-Bridges Co.
Edward N. Riddle Co.
Albert Wahle Co.

Lamps, Therapeutic Eastern Laboratories, Inc.

Lamps, Smokers Lees Co., K. F.

Lighting, Decorative Cassidy Co., Inc. Consolidated Lamp & Glass Co.

Lighting Fixtures (See Fix tures)

Lighting, Industrial
Beardslee Chandelier Mfg. Co.
Benjamin Elec. Mfg. Co.
Cassidy Co., Inc.
Consolidated Lamp & Glas Co. Curtis Lighting, Inc. Faries Mfg. Co. General Electric Co. General Electric Co. Guth. Edwin F. Hygrade Lamp Co. Macbeth Evans Glass Co. Macbeth Evans Glass Co. Star Glass Co. Westinghouse E. & M. Co. Westinghouse E. & M. Co.

Lighting Units
Beardslee Chandelier Mfg.
Co.
Consolidated Lamp & Glass Co. Curtis Lighting. Inc.
Frink, Inc., I. P.
Guth Co., Edwin F
Macbeth Evans Glass Co.
The Miller Co.,
Moe-Bridges Co.
Planetite Co., Inc.
Westinghouse E. & M. Co.

Lamps, Desk
Beardalee Chandelier Mfg.

Lightning Arresters
Freeman Electric Co.. E. H.
Electric Service Supplies
Co.

Locators, Radiant Alter & Co., Harry Smith Co., T. C.

Loga, Electric Fireplaces Strait & Richards

Loud Speakers, Radio
Brandes, Inc., C.
Bristol Co., The
Crosley Mfg. Co.
Frost, Herbert H.
General Radio Corp.
Kirkman Engineering Co.
Music Master Corporation
Radio Corp. of America
Reichmann Co.
Roller-Smith Co.
Sonora Phonograph Co.
Stanley & Patterson
Timmons, J. S.
Western Electric Co.

Lugs and Terminals
Chicago Fuse Mfg. Co.
Patton-MacGuyer Co.
Sherman Mfg. Co., H. B.

Mailing Lists Electrical
Dealers and Radio Lists
Trade Circular Addressin
Co.

Marine Wiring, Fittings & Fixtures
Benjamin Elec. Mfg. Co.
Rome Wire Co.
Western Electric Co.

Medical Accessories
Bleadon-Dun Mfg. Co.
Hydro Electric Mfg. Co.

Mica Products
New England Mica Co.

Mixers, Drink Arnold Electric Co.

Molded Insulation American Insulator Corp. Garfield Mfg. Co. General Electric Mfg. Co.

Moldings
American Wiremold Co.
Emerson Electric Mig. Co.
General Radio Corp.
National Metal Molding Co

Motors, A.C.
Century Electric Co.
Domestic Electric Co.
Emerson Elec. Mfg. Co.
Galvin Elec. Mfg. Co.
General Electric Co.
Sturtevant Co., B. F.
Valley Electric Co.
Wagner Elec. Corp. Wagner Elec. Corp. Western Electric Co. Westinghouse E. & M. Co.

Motors, D.C.
Emerson Electric Mfg. Co.
Galvin Electric Mfg. Co.
General Electric Co.
Robbins & Myers
Sturtevant Co., B. F.
Western Electric Co.
Westinghouse E. & M. Co.

Motors, Fractional H. P.
Arnold Electric Co.
Century Electric Co.
Domestic Electric Co.
Galvin Electric Mfg. Co.
General Electric Co.
Kendrick & Davis
Ohio Electric & Controller
Co. Sturtevant Co., B. F.
Wagner Elec. Corp.
Westinghouse Elec. & Mfg
Co.

Motors, Phonograph Arnold Electric Co. General Electric Co. Liberty Elec. Corp. of N. Y. Westinghouse E. & M. Co.

For the addresses of the manufacturers listed here. please refer to their advertisements in this issue. The index to advertisers may be found on page 183.

Motors, Sewing Machine Arnold Electric Co. Galvin Electric Mfg. Co. General Electric Co. Western Electric Co. Westinghouse E. & M. Co.

Novelties (See Toys and Novelties)

Outlets Conn. Electric Mfg. Co. Pass & Seymour

Packing Boxes (See Boxes, Shipping)

Panel-Boards (See Switch-

Percolators, Electric Electrahot Appliances, Inc. Gold Seal Electric Co. Security Elec. Mfg. Co. Superior Electric Products Co. Westinghouse E. & M. Co. Wolcott Mfg. Co., Frank E.

Plates, Flush, Switch Arrow Elec. Co. General Electric Co. Waterbury Mfg. Co.

Plants, Light and Power Western Electric Co. Westinghouse E. & M. Co.

Plugs, Attachment, and Caps Ajax Electric Specialty Co. Arrow Elec. Co. Benjamin Elec. Mfg. Co. Connecticut Elec. & Mfg. Co. Dubilier Condenser & Radio Co.
Freeman Electric Co., E. H.
General Electric Co.
Hart & Hegeman Mig. Co.
Pass & Seymour
Richards & Co., George
Sears, Henry D.
Waterbury Mig. Co.

Plugs, Heater Electrahot Appliances, Inc. Propp Co., M. Smith Co., T. C.

Polishers and Buffers General Electric Co. Valley Electric Co. Westinghouse E. & M. Co.

Portables (See Lamps, Portable)

Projectors, Electric
Curtis Lighting, Inc.
Electric Service Supplies Co.
General Electric Co.
Timberlake & Sons
Universal Electric Stage
Lighting Co.
Western Electric Co.
Westinghouse E. & M. Co.

Pull Sockets
Arrow Elec. Co.
Benjamin Elec. Mfg. Co
Connecticut Elec. & Mfg.
Co. Co.
Freeman Electric Co., E. H.
Hart & Hegeman Mfg. Co.
Hyman & Co., Henry
Hubbell, Inc., Harvey
McGill Mfg. Co.

Pumps, Automobile Hydro Electric Mfg. Co.

Pumps, Motor Driven General Electric Co. Hydro Electric Mig. Co Westinghouse E. & M. Co.

Push Buttons
Benjamin Elec. Mfg. Co.
Edwards & Co., Inc.
General Electric Co.
Stanley & Patterson
Waterbury Mfg. Co.
Westinghouse E. & M. Co.

Radiant Heaters, Electric Simplex Elec. Heating Co. Westinghouse E. & M. Co.

Radiant Heater Replacement Units Simplex Elec. Heating Co.

Radio Books and Instruction McGraw-Hill Book Co.

Radium Compound Specialties (Also see Locators)

Radio Parts and Accessories
Acme Wire Co.
Adams-Morgan Co.
Aiax Elec. Specialty Co.
Aiter & Co., Harry
American Transformer Co.
Andrea, Inc., F. A. D.
Belden Mfg. Co.
Bleadon-Dun Mfg. Co.
Brandes, Inc., C.
Colonial Radio Corp.
Continental Radio & Mec.
Co.
Copperweld Steel Commencers Co. Copperweld Steel Co. Crosley Mfg. Co. Dayton Fan & Motor Co. De Forest Radio Co. Dubilier Condenser & Radio

Dayton Fan & Motor Co.

De Forest Radio Co.

Dublier Condenser & Radio Co.

Dublier Condenser & Radio Co.

Durham Mig. Co.

Riastoid Fibre Co.

French Mig. Co. C. M.

Freshman Co., Chas.

Frost. Herbert H.

Galvin Riec. Mig. Co.

General Electric Co.

General Radio Co.

Gilbert Keator Corp.

Hart & Hegeman Mig. Co.

Hart & Hegeman Mig. Co.

Hart Selectric Co.

Hoosick Falls Radio Pts.

Mig. Co.

Howard Radio Co.

Johns-Pratt Co.

Killark Elec. Mig. Co.

Lingbein & Kaufman Co.

Rome Wise Co.

Patton-MacGuyer Co.

Radio Corp. of America

Reichmann Co.

Roller-Smith Co.

Rome Wire Co.

Sonora Phonograph Co.

Stanley & Fatterson, Inc.

Starr Equipment Corp.

Thermodyne Radio Corp.

Thermodyne Radio Corp.

Thordarson Elec. Mig. Co.

Waterbury Mig. Co.

Western Radio Mig. Co.

Western Radio Mig. Co.

Western Radio Mig. Co.

Westwyre Co.

Yaxlex Mig. Co.

Radio Receiving Sets,
Complete
Adams-Morran Co.
American Radio Research
Corp.
Corp.
Andrea, Inc., F. A. D.
Bristol Co., The
Colonial Radio Corp.
Crosley Mfg. Co.
De Forest Radio Co.,
Federal Tel. & Tel. Co.
General Electric Co.
General Badio Co.
Latham, E. B.
Pacent Electric Mfg. Co.
Radio Corp. of America
Simplex Elec. Heating Co.
Sieper Radio Corp.
Sonora Phonograph Co.
Starr Equipment Co.
Western Radio Mfg. Co.
Western Radio Mfg. Co.
Westinghouse E. & F. Co. Radio Receiving Sets,

Radio Receiving Sets, Knockeddown Andrea, Inc., F. A. D.

Ranges, Combination
Westinghouse E. & M. Co.

Ranges, Electric Electrahot Appliances, Inc. Estate Stove Co. Karg Elec. Hot Air Furnace Co. Co. Simplex Elec. Heating Co. Walker & Pratt Mfg. Co. Western Electric Co. Westinghouse E. & M. Co.

Receptacles, Base Board and Wall Ajax Electric Specialty Co. Arrow Elec. Co. Benjamin Elec. Mfg. Co.

(Continued on page 181)



EMERSON FANS For 1925

NEW bulletins, prices and announcement of important new sales helps for dealers will be ready January 1st.

Seventy distributors located at convenient points carry Emerson Fans. Write to us for name of nearest.

Wait for the man with the Emerson line

The Emerson Electric Mfg. Co. 2018 Washington Ave.

50 Church St. New York City

ST. LOUIS, MO.



The right start for the New Year

Open 1925 with a rousing campaign on the Guardian Safety Iron



THIS iron with its wonderful automatic heat control will lift your Electric Iron sales out of the non-profitable, competitive class.

Outside of its popular price, the Guardian Safety Iron has a deep-seated appeal — that of absolute safety. It never becomes overheated — it can't start a fire.

The Guardian Safety Iron has real sales merit. Every housewife who buys one at your store will be an enthusiastic booster, because its fire-preventive feature is something everyone easily understands. It's worth telling about—worth featuring.

The Guardian Safety Iron is the first 100% safe iron ever offered. Priced reasonable. Do real business with it in 1925.—Write.

ROCK ISLAND MANUFACTURING Co. ROCK ISLAND, ILL.



Freeman Electric Co., E. H. General Electric Co. Hart & Hegeman Mig. Co. Hubbell, Inc., Harvey Pass & Seymour Sears, Henry D. Western Electric Co.

Rectifiers
General Electric Co.
Thordarson Elec. Mfg. Co.
Westinghouse E. & M. Co.
Reflectors (See Shades and
Reflectors)

Resistance Units General Electric Co. Westinghouse E. & M. Co.

Bheostats
Adams-Morgan Co.
Crosley Mig. Co.
Frost, Herbert H.
General Electric Co.
Hart & Hegeman Mig. Co.
Pacent Electric Co.
Westinghouse B. & M. Co.

Bosettes
Arrow Elec. Co.
Freeman Electric Co., E. H.
Hart & Hegeman Mfg. Co.
Pass & Seymour
Sears, Henry D.

Searchlights (See Projectors

Sectional Cabinets McLean Mfg. Co., W. B.

Sewing Machines, Electric Western Electric Co.

Shade Accessories, Lamp Waterbury Mfg. Co.

Shade Holders
Connecticut Elec. & Mig
Co.
Curtis Lighting, Inc.
General Electric Co.
Hart & Hegeman Mig. Co.
Hubbell, Inc., Harvey
Noe & Sons, Wm. R.
Sears, Henry D.
Waterbury Mig. Co.

Shades and Reflectors
Beardslee Chandelier Mfg.
Co.
Benjamin Elec. Mfg. Co.
Consolidated Lamp & Glass
Co.
Curtis Lighting, Inc.
Farles Mfg. Co
Frink, Inc., I. P.
General Electric Co.
Guth Co., Edwin F.
Hubbell, Inc., Harvey
Macbeth Evans Glass Co.
Western Electric Co.

Shades, Silk & Parchment W. R. Noe & Sons Guth Co., Edwin F.

Shipping Boxes and Case (See Boxes, Shipping)

Signal Systems
General Electric Co.
Save-A-Life Lite Co.
Stanley & Patterson

Signs, Electric Flexiume Sign Co. Frink, Inc., I. P. Save-A-Life Lite Co.

Sirens (See Horns and Sirens)

Soap, Washing Machine Hydro Electric Mfg. Co.

Sockets and Receptacles
(See also Pull Sockets)
Adams-Morgan Co.
Aiax Elec. Specialty Co.
Anylite Electric Co.
Arrow Elec. Co.
Benjamin Elec. Mig. Co.
Connecticut Elec. & Mig.
Co.
Crosley Mig. Co.
General Electric Co.
General Radio Corp.
Hart & Hegeman Mig. Co.
Hart & Hegeman Mig. Co.

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WHAT AND WHERE TO BUY-Continued from page 179

Hubbell, Inc., Harvey Pass & Seymour, Inc. Richards & Co., George Sears, Henry D. Stanley & Patterson

Soldering Irons (See Irons, Soldering)

Solder & Soldering Compds. McGill Mfg. Co.

Stage Lighting Apparatus Curtis Lighting, Inc. Frink, Inc., I. P. General Electric Co. Universal Electric Stage Lighting Co.

Stampings, Brass, Etc. Patton-MacGuyer Co. Waterbury Mfg. Co.

Starters, Motor General Electric Co. Square D Co. Westinghouse E. & M. Co.

Steel Shelving
General Fireproofing Co.

Storage Batteries Westinghouse E. & M. Co.

Store and Office Equipment Flexlume Sign Co. General Fireproofing Co. McLean Mfg. Co., W. B.

Store Fixtures (See Fixtures Lighting, Show Case and Window)

Stoves, Electric Estate Stove Co. Simplex Elec. Heating Co. Westinghouse E. & M. Co.

Stoves, Cook, Electric, Fire less Type Malleable Iron Range Co. Swartzbaugh Mfg. Co.

Stoves, Table (See Grills and Table Stoves)

Substations, Out Door General Electric Co. Westinghouse E. & M. Co.

Supplies, Wiring, Electric Chicago Fuse Mfg. Co. Connecticut Elec. & Mfg. Co. General Electric Co. Hart & Hegeman Mfg. Co. Rome Wire Co. Square D Co. Western Electric Co.

Switchboard Materials
Connecticut Elec. & Mfg.
Co.
Penn Electric & Mfg. Co.
Westinghouse E. & M. Co.

Switchboarda
Benjamin Elec. Mfg. Co.
Federal Tel. & Tel. Co.
General Electric Co.
Westinghouse E. & M. Co.

Switchboard Materials
Penn Elec. & Mfg. Co.
Roller-Smith Co.
Western Electric Co.

Switches, Canopy Arrow Electric Co. McGill Mfg. Co. Pass & Seymour, Inc. Sears, Henry D.

Switches, Clock Operated Berry, A. Hall

Switches, Disconnect
Electric Service Supplies Co.
General Electric Co.
Penn Electric & Mfg. Co.
Westinghouse E. & M. Co.

Switchers, Disconnect Electric Service Supplies Co.

Switches, Feed Through Arrow Elec. Co. Pass & Seymour

Switches, Knife
Berry, A. Hall
Connecticut Elec. & Mfg.
Co.
Freeman Electric Co., E. H.
General Electric Co.
Hart & Hegeman Mfg. Co.
Morse Co., Frank W.
Penn Elec. & Mfg. Co.
Westinghouse E. & M. Co.

Switches, Pendant
Arrow Elec. Co.
Connecticut Elec. & Mfg.
Co.
Freeman Electric Co. E. H.
Hart & Hegeman Mfg. Co.
Pass & Seymour, Inc.
Quadrangle Mfg. Co.
Sears, Henry D.

Switches, Push Button and Snap Arrow Elec. Co.
Connecticut Elec. & Mfg. Co.
General Electric Co.
Hart & Hegeman Mfg. Co.
Hubbell, Inc., Harvey
McGill Mfg. Co.
Morse Co., Frank W.
Sears, Henry D.
Westinghouse E. & M. Co.

Switches, Safety
Condit Electric Mfg. Co.
Domestic Electric Co.
General Electric Co.
Johns-Pratt Co.
Square D Co.
Westinghouse E. & M. Co.

Switches, Time General Electric Co. Berry, A. Hall Reliance Automatic Lighting Co. Tork Co., Inc.

Switches, Tumbler Connecticut Elec. & Mfg. Co. Hart & Hegeman Mfg. Co.

Table Appliances, Electric Nat'l Transformer Mfg. Co. Western Electric Co. Westinghouse E. & M. Co.

Tape and Cloth, Insulating Appleton Rubber Co. Boston Woven Hose & Rubber Co. Clifton Mfg. Co. General Electric Co. Westinghouse E. & M. Co.

Telephones
Federal Tel. & Tel. Co.
Froat, Herbert H.
Pacent Electric Co.
Roller-Smith Mfg. Co.
Stanley & Patterson

Terminals
Patton-MacGuyer Co.
Sherman Mfg. Co., H. B.
Stanley & Patterson
Waterbury Mfg. Co.

Testing Apparatus General Radio Co. Roller-Smith Co.

Testing Devices, Meter Johns-Pratt Co. Roller-Smith Co. Westinghouse E. & M. Co

Testing Laboratories (See Laboratories, Testing)

Thawing Outfits General Electric Co.

Theater Apparatus, Electric General Electric Co. Strait & Richards Universal Elec. Stage Light Ing Co. Westinghouse E. & M. Co.

Toasters, Electric Chicago Flexible Shaft Co.

For the addresses of the manufacturers listed here, please refer to their advertisements in this issue. The index to advertisers may be found on page 183.

Continental Radio & Elec.
Co.
Gold Seal Elec. Co.
Rock Island Mfg. Co.
Security Elec. Mfg. Co.
Simplex Elec. Heating Co.
Western Electric Co.
Westinghouse E. & M. Co.

Tools, Portable, Motor-Driven Koch & Co., Paul W.

Tools, Wiring
Hykon Mfg. Co.
Martin & Sons. H. P.
Western Electric Co.
Westinghouse E. & M. Co.

Torches, Blow, Gasoline & Kerosene McGill Mfg. Co.

Toys & Novelties
Lionel Corp.
Thordarson Elec. Mfg. Co.

Transformers, Bell Binging General Electric Co. Killark Elec. Mfg. Co. Stanley & Patterson Thordarson Elec. Mfg. Co. Westinghouse E. & M. Co

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Wire, Electric Resistance Driver-Harris Electrical Alloy Hoskins Mfg. Co. Rockbestos Products Corp.

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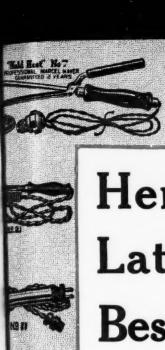
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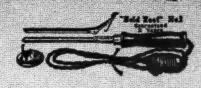
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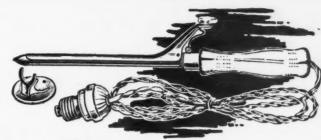








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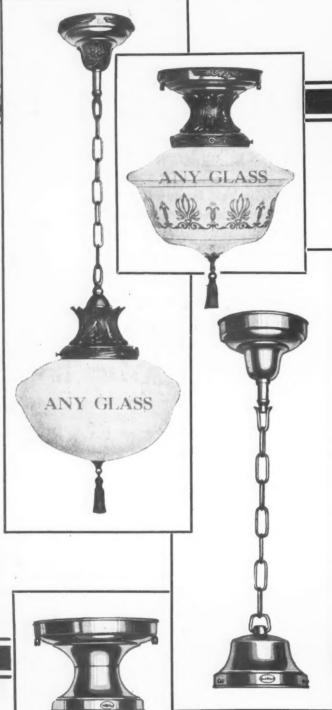








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